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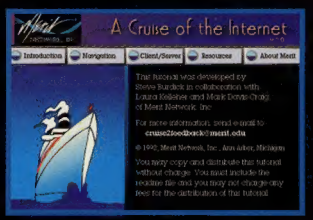

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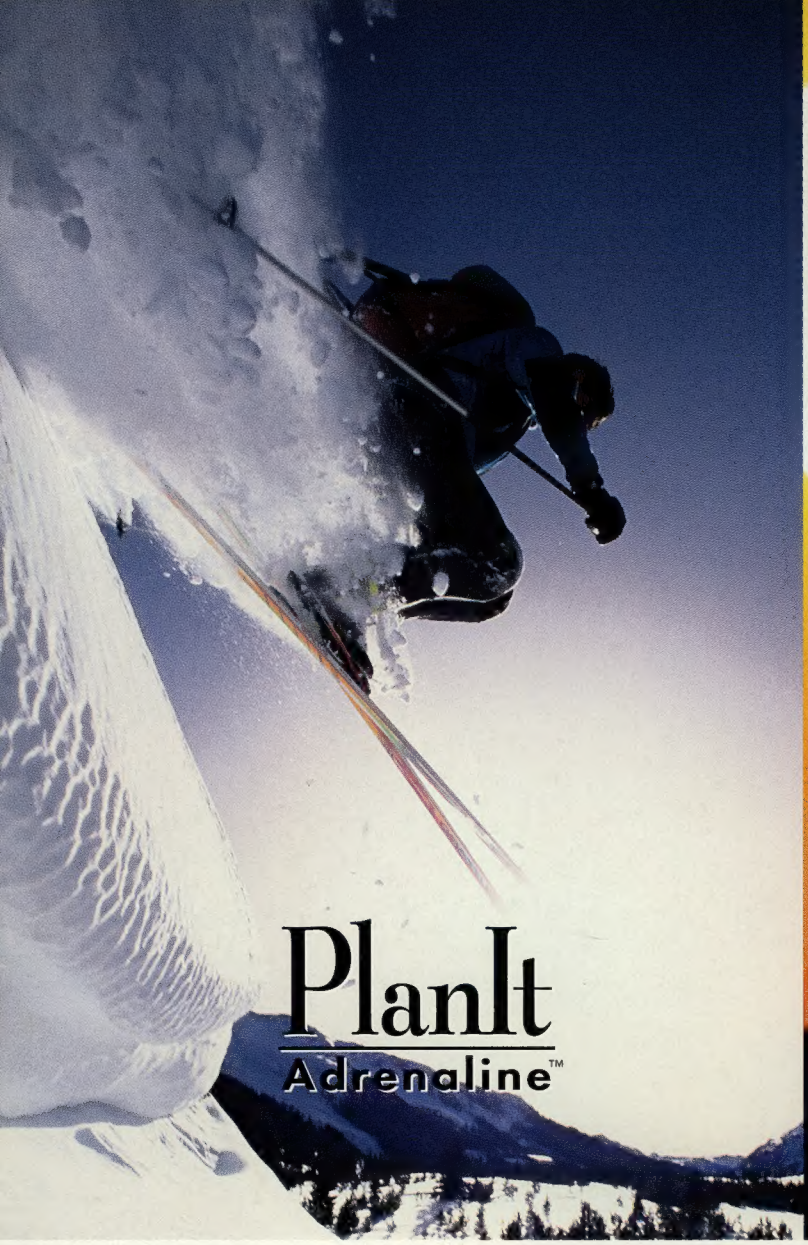

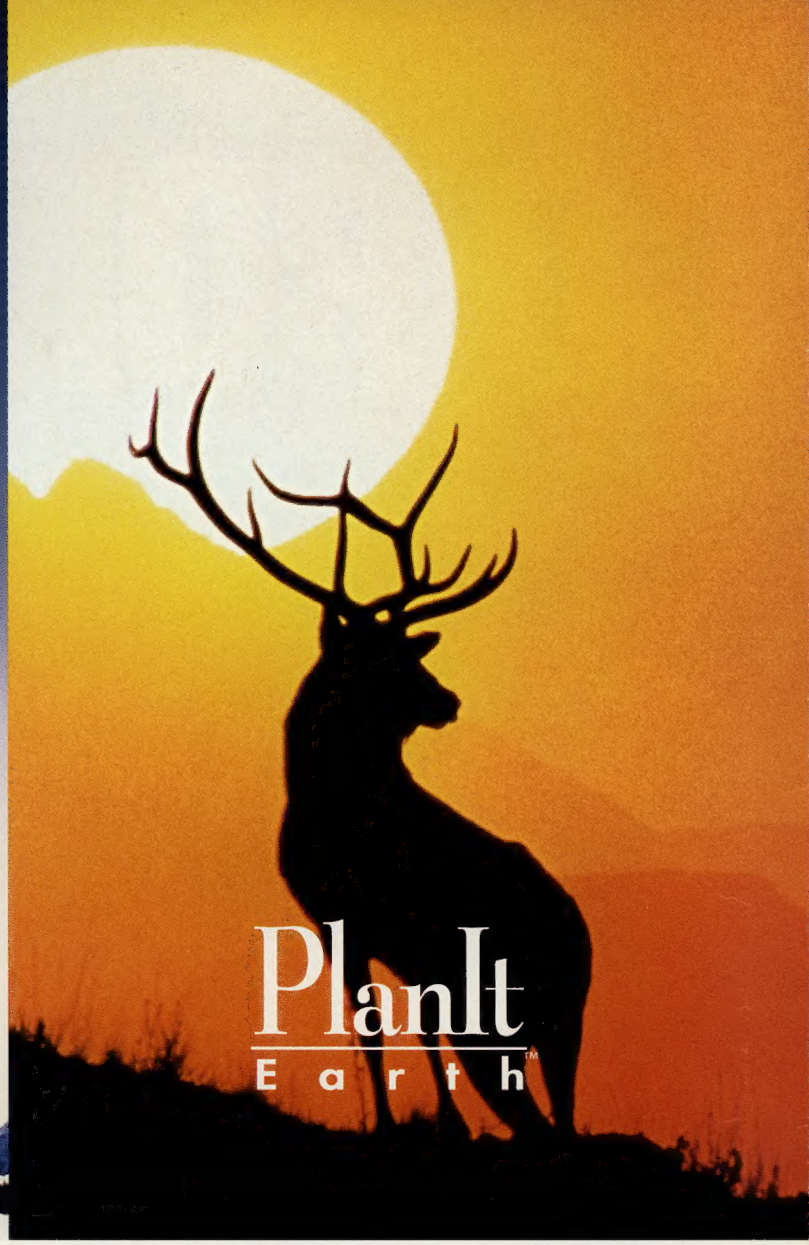

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Product Information Number 122

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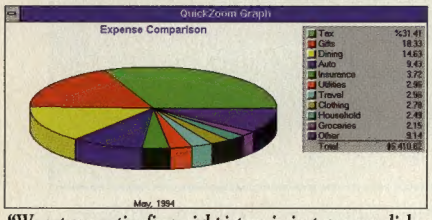

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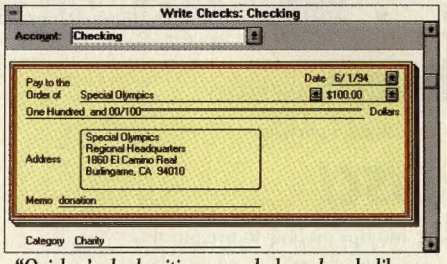

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CD-ROM Today

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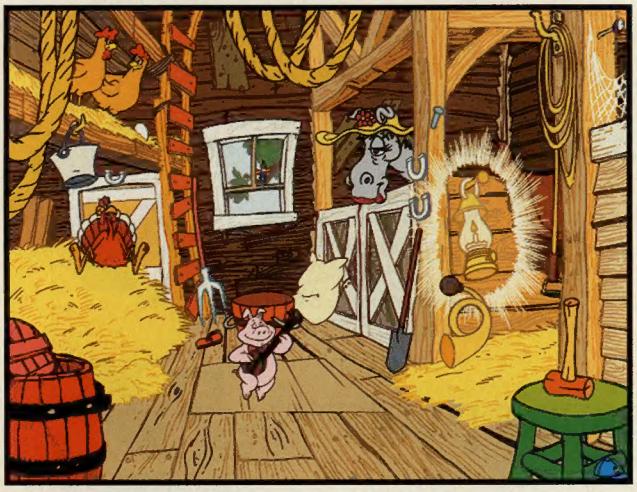

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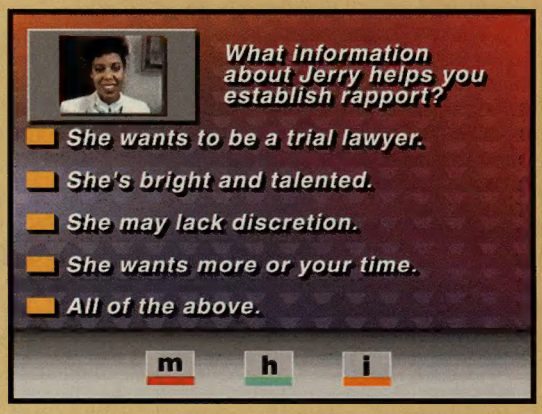

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Produced in the United States of America.

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CD-ROM Today the Disc!

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3-D Dinosaur Adventure

Colorful demo from Knowledge Adventure

GAMES

Star Trek: 25th Anniversary

Playable first episode with voices of original cast

SIMULATIONS

SimCity 2000

Fully playable demo of this addictive simulator

APPLICATIONS

Inspiration

Interactive opportunity to test Mac brainstormer

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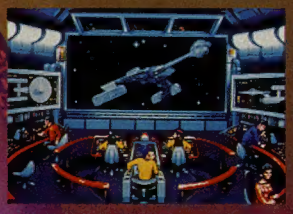

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ENHANCED CINEMATIC CD-ROM MULTIMEDIA DOS

Product Information Number 116

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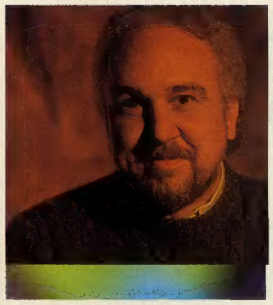
FIRST WORD



We're still just shy of a year-old as a magazine, but what a ride it's been. We've witnessed the phenomenal growth of the CD-ROM consumer market, a literal avalanche of CD titles, and more powerful hardware. In this industry, it seems nothing is static for more than a day. And *CD-ROM Today* is no exception. Since our debut last May, we've built on each previous issue in both editorial and design. The biggest leap forward, however, is this one.

CD-ROM Today is now a multimedia package, a magazine/CD-ROM combo that delivers the real thing. With *The DISC!*, you can see, hear, and experience software that we cover in the magazine, and you can explore a huge variety of programs. And the emphasis is on *huge variety* — we've put more than 600 megabytes of material on the CD. (Of course, that's a combination of PC and Mac files, so your system won't reflect the total megabytes available.)

For a complete rundown of what's on this first edition of *The Disc!*, turn the page. We strongly suggest that you peruse this section first — it not only informs you of the disc contents, but also offers tips and other instructions that may help you avoid any problems. (We can now truly sympathize with software publishers who admonish you to read the documentation first.)

We're already at work on *The Disc!* for next issue, and you'll see further refinements (and no duplication of material from this issue's CD-ROM!)

While *The DISC!* is our biggest news, we're also pleased to bring you several new columns and a more concise reviews design that allows us to cover more titles (52) than any other magazine in this category.

New columns include "WinView" by Charles Brannon, "MacInations," by Steve Anzovin, and "ShareWare File," by David A. Wade. Tim Victor, who has written the "VideoView" column since our first issue, is broadening his scope with a new column, "TechnoVision," in which he'll be offering his valuable insights into a wider variety of technology issues.

Another new look this issue is "NewsLine." Assistant Editor Phill Powell and Associate Art Director Hudson Best have completely revamped both the approach and look of this section.

We'd like to hear your comments and suggestions, and we've made it easier for you to reach us. You can contact us by email at *cdromtoday@aol.com* (America Online) or by fax at 910-623-1165. If faxing, be sure to address your note to CD-ROM Today. And if you want to reach one of our columnists, check out the email address at the end of his column.

And a special thanks for loading us up! We hope you enjoy the whole package.

Lance Elko

Lance Elko
Editorial Director

CD-ROM Today

April/May 1994

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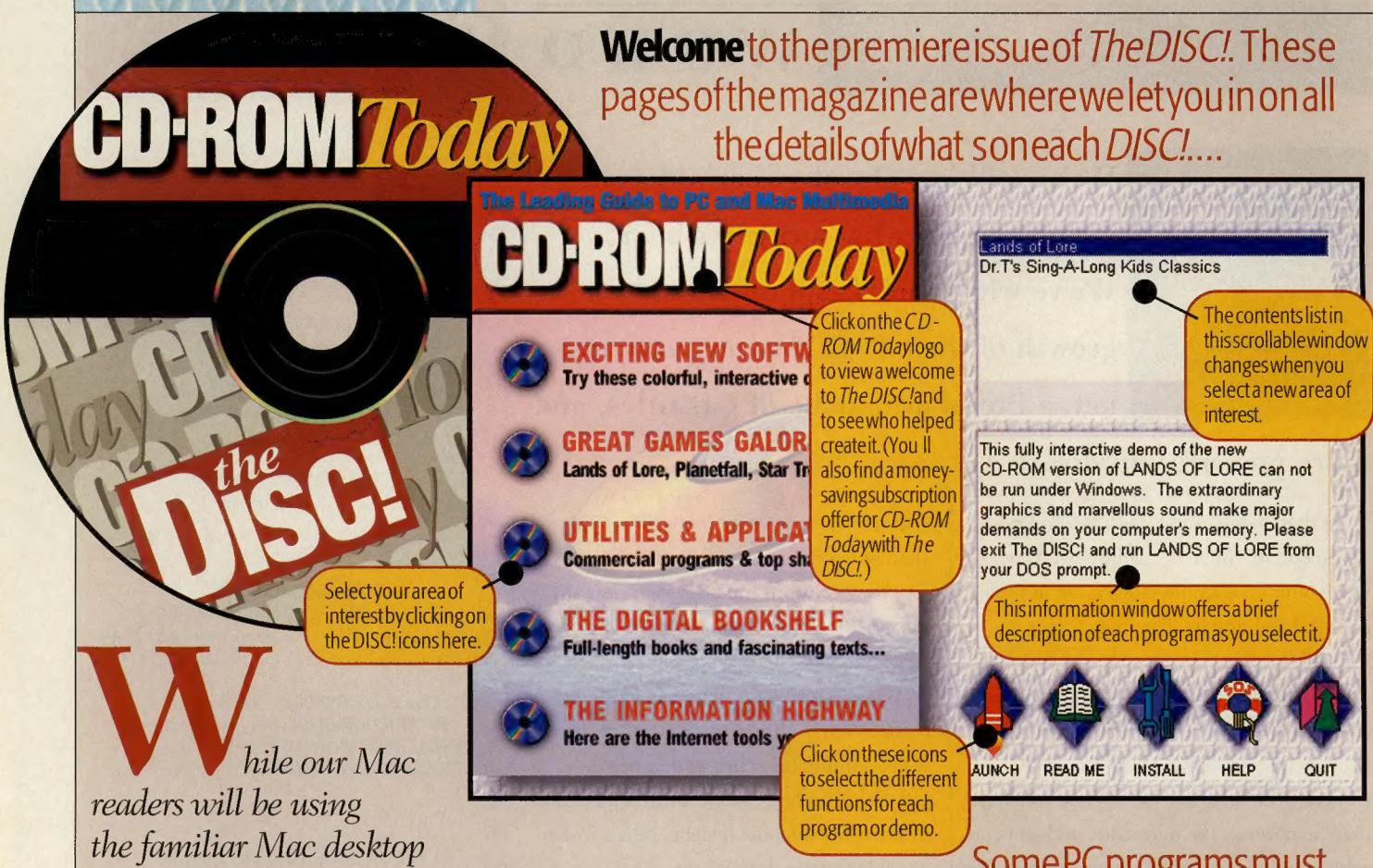
Welcome to the premiere issue of *The DISC!*. These pages of the magazine are where we let you in on all the details of what's on each *DISC!*....



While our Mac readers will be using the familiar Mac desktop environment — with its folders, files, and icons — to access The DISC!, our PC readers will use the custom-made CD-ROM Today interface you see above. We've designed it to be as intuitive and easy to use as possible.

Some PC programs must run from DOS. Please note instructions in these pages and on The DISC!.

LANDS OF LORE: THE THRONE OF CHAOS

Virgin Interactive (PC demo only)

Take the solid game play of the popular *Lands of Lore* fantasy role-playing (FRP) title, and then add some enhancements and the voices of no less than Patrick Stewart (Captain Picard of "Star Trek: The Next Generation") and other actors — and you've got a multimedia extravaganza.

Our PC demo not only brings you the excellent introductory sequences, but the interactivity as well.

Our Lands of Lore demo lets you play a good bit of the game AND hear the new digitized speech.

The *Lands of Lore* interface is instantly accessible. The top-right third of the screen is given over to a first-person view of your surroundings, with portraits of you and your fellow adventurers below this graphic window. At the bottom left are two buttons — one for healing and another for accessing game functions. You can

use the arrows for movement, or use the keyboard. Beneath the portraits is a scrollable inventory bar. And, at top left, you'll find your available magic spells.

Thanks to Virgin Interactive and the developers — Westwood Studios — *The DISC!* contains two ways you can enjoy *Lands of Lore*. Because of the size and scope of this demo, you will need to access the files from the DOS prompt rather than our Windows user interface.

From the DOS prompt (probably drive D:> or E:>), type **cd lol_demo** to change to the Lands of Lore demo subdirectory. Then type **loldemo** to run the demo. Or, when you wish to run the interactive demo game, at the CD-ROM drive prompt, type **cd lol_game** to change to the game subdirectory. Then type **lands** to run the interactive demo.

Virgin Interactive, 18061 Fitch Avenue, Irvine, CA 92714

(NOTE: See page 53 for a special offer to buy the full CD-ROM version of Lands of Lore *at an exceptional savings.)*

RETURN TO ZORK
& RICHARD SCARRY'S *The Best Neighborhood Ever*

Activision (PC demo only)

Prepare to get lost — in the wonderful world of ZORK!

When this extraordinary game appeared, Matthew Firme, senior editor of our sister publication, *PC Gamer* magazine, raved:

"*Return to ZORK* not only revives a classic adventure cycle, but catapults it from the text-only beginnings of adventure gaming into the future of interactive entertainment. Best of all, *RTZ* has made the amazing leap from past to future with the grace, humor, and fully realized game world we've come to expect of the name ZORK....The look of *Return to ZORK* and the sheer professionalism of its presentation will command your admiration each time you sit down to play.

"This is truly an amazing, next-generation product, of such unparalleled quality and technical excellence that it must become the model for all tomorrow's designers."

If you haven't yet been caught up in the marvelous world of ZORK, now is your chance to try out an interactive demo on *The DISC!*. We know you'll love it.

To play the game demo, you can install the setup program from Windows. However, since there are so many variations on PC systems running Windows, for simplicity sake we advise that you exit Windows and run the **install.exe** program from the subdirectory called **activisn**. The setup program will take you from there.

You'll be captivated by the beauty and the game play of our interactive demo of Return to ZORK.

(NOTE: CD-ROM Today *is able to offer its readers the full version of* Return to ZORK *for only $54.95 [saving you $25 off the recommended list price!] See page 53 for details.)*

A delightful experience is also awaiting you in the Activision title, *Richard Scarry's The Best Neighborhood Ever*, another interactive demo. This edutainment program for youngsters uses the same installation interface that *ZORK* uses — so, be sure to run the *ZORK* **install.exe** before you try to load *Scarry*. Then, when ready, you type **rscarry** from the **rtz-cd** subdirectory created on your hard drive during *ZORK* installation.

Activision, 11440 San Vicente Blvd., Los Angeles, CA 90049

Installing and Using *The DISC!*

CD-ROM Today's The DISC! is designed for ease of use. Here's how to get started.

PC owners:

No doubt you've already popped *The DISC!* into your CD-ROM drive. Here are a few helpful hints that can help you get going quickly:

HELP!: If, for some reason, you are unable to run *The DISC!* following those steps, try this. Run the File Manager (within the Main subdirectory). Click on the drive designation for your CD-ROM drive at the top of your screen. When that displays *The DISC!* directory, double-click on the "Magazine" subdirectory. Within that subdi-rectory, double-click on the "frontend.exe" file. That should load *The DISC!'s* user interface.

1. Turn on your computer, and load Windows.
2. From the Program Manager, click on the File menu and then select Run. From the Run window, click on Browse.
3. Change the Directory designation to the letter representing your CD-ROM drive (usually D: or E:), by clicking on the appropriate letter in the window called Drive.
4. Double-click on the "install.exe" file you see, or single-click on that, and then on the OK button.
5. *The DISC!* user interface should then load.

File Edit View Label Special

Installing and Using *The DISC!*

CD-ROM Today's The DISC! is designed for ease of use. Here's how to get started.

Mac owners:

1. *The DISC!* uses the Macintosh's own elegant desktop environment to display its contents.
2. After turning on your system, insert the CD-ROM, and wait for *The DISC!* icon to appear.
3. Click on that icon, and the resulting window will show you the various folders in which *The DISC!* contents are contained.

PC owners: *The DISC!* is meant to run from Windows, and we know that the overwhelming majority of multimedia PC owners use that interface. If, for some reason, you're using a PC but not running Windows, portions of *The DISC!* can still be used from the DOS prompt. As you peruse our *DISC!* Pages, you'll find a variety of demos and programs that can be run from DOS.

Also, please note that the user interface is optimized to run in an SVGA video mode, rather than a VGA or lesser video mode. If you do have VGA rather than SVGA, the interface will still work without problems but won't have the colors and some of the box outlines that are normally a part of the system.

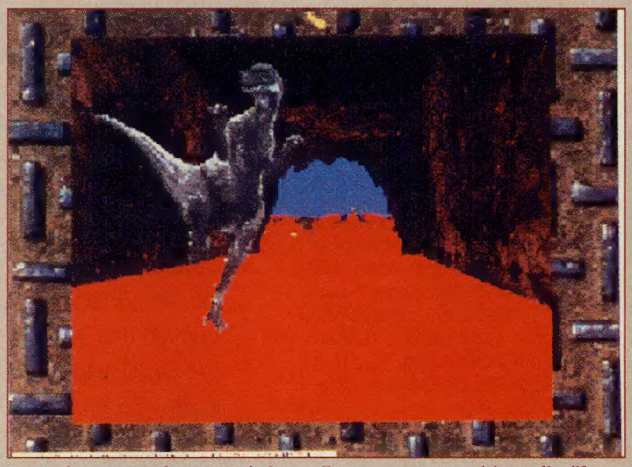
3-D DINOSAUR ADVENTURE & UNDERSEA ADVENTURE

Knowledge Adventure (PC demos only)

These two interactive demos from Knowledge Adventure really show off what multimedia computing is all about. *Undersea Adventure* is an exploration of the undersea world and its many inhabitants. It's a fascinating journey, interactive and entertaining. *3-D Dinosaur Adventure* lets you explore the world of dinosaurs through a Dinosaur Encyclopedia, a 3-D Dinosaur Museum, full-motion and 3-D movies, and more. Both products use Knowledge Adventure's Zoomscape, Virtual Object Control and Express Movie Player technologies.

When you're ready to run either of these program demos, you can access them from our PC user interface. They use a single setup procedure — permitting you to access them both from a common menu.

During the setup, you will be asked if you wish to launch the demos from Windows. If you do, be aware that the installation will make a change to your computer system's **win.ini** and **system.ini** files. If you don't want any changes to these system files, then exit Windows and run the setup program from the DOS prompt. Type **setup** from the **\D** subdirectory on your CD-ROM drive.



3-D Dinosaur Adventure *brings dinosaurs to multimedia life.*

(NOTE: See page 53 for a special offer to buy the full version of Undersea Adventure *and/or* 3D Dinosaur Adventure *at an exceptional price.)*

Knowledge Adventure, 4502 Dyer Street, La Crescenta, CA 91214.

DR. T'S SING-A-LONG KIDS' CLASSICS

Dr. T's Music Software (PC only)

By special arrangement with Dr. T's Music Software, we're able to bring you this charming five-song special edition of the CD-ROM version of the company's *Sing-A-Long* title.

The songs and accompanying images are aimed at children ages 3 to 10 years, and it's the only multimedia title that combines sound-card music, wave-table music, CD audio, and animations.

This is a unique sing-a-long product for children 3 to 10 years—a special edition for The Disc!.

Since multimedia audio can be a tricky area for PCs — so many sound cards, device drivers, etc. — the folks at Dr.

T's have included here a special **readme.wri** file that is a troubleshooting guide. Push the **Read Me** button on our interface or use the Windows *Write* word processor in your Windows system to read this file.

Dr. T's Music Software, 124 Crescent Road, Needham, MA 02194

INSPIRATION

Inspiration Software(Mac demo only)

This is an inspired Mac program to help you brainstorm, visualize, and organize your thoughts.

"Nobody other than Inspiration, is doing anything to model the process of writing. I think Inspiration is a brilliant concept." — Douglas Adams, author of Hitchhiker's Guide to the Galaxy

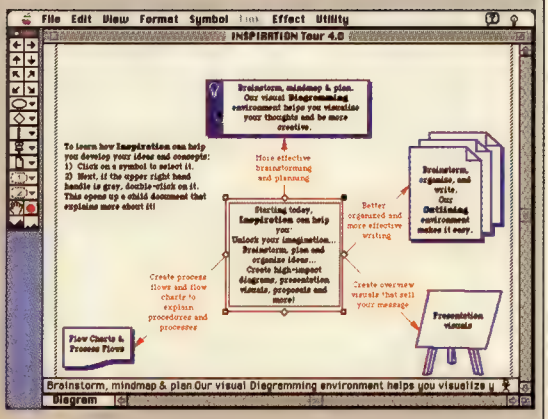
"Our brainstorming tool of choice is Inspiration, a whizbang outliner and free-form-diagram generator that's finally fulfilled its promise in version 4.0." — *MacUser* magazine

Inspiration is a power tool for the imagination — it computerizes the brainstorming process and helps you visually develop your ideas quickly and easily right on the computer screen. The brilliance of this program is the way in which it integrates both a diagram view — the picture of your mind map — with a hierarchical outline view, thus pushing the process along from the raw ideas you jot down, using its unique Rapid Fire command, towards an organized structure for writing, flow-charting, or any other form of presentation.

Try out this limited-use version — and we're sure you'll agree that *Inspiration* is the kind of software that makes the Macintosh a unique platform for creative minds.

The *Inspiration* sampler includes a guided tour and an interactive demo of the program. It works on any Macintosh. To order a full working version of *Inspiration*, call 1-800-877-4292.

Inspiration Software, P.O. Box 1629, Portland, OR 97207



Inspiration is a marvelous brainstorming, idea outlining tool — available only on the Mac.

WinNET MAIL

Computer Witchcraft (PC only)

Your Windows gateway to the Internet!

Many potential infonauts face two seemingly insurmountable hurdles. How do you gain access to the Internet? And, once on line, how on earth do you find your way around? Computer Witchcraft have come to the rescue with *WinNET Mail*, a navigating interface for Windows users, and the WinNET Internet Access Service. Within minutes you can be on the net, receiving and sending your own e-mail, reading or posting to any of the 6000+ discussion groups and forums, or downloading useful files. This Internet interface is from the same company that brings you *MegaEdit*, the excellent shareware editor for Windows (also on *The DISC!*), so you know it'll be easy to use and very polished. *WinNET Mail's* free software package, included on *The DISC!*, is a starter kit you can't afford to be without.

Computer Witchcraft, 330-F Distillery Commons, Louisville, KY 40206-1919

PROBLEM? NO PROBLEM!

If nothing works...

While we at *CD-ROM Today* cannot provide technical and customer support for problems you may encounter with the many different programs and demos on *The DISC!*, we've worked very hard to make sure that your multimedia experience with *The DISC!* is an absolute joy. We've tested extensively to catch every kind of problem that might crop up. But, if you're familiar with today's multimedia computing environment, you know that the range of potential problems stemming from hardware and software incompatibilities is wide indeed.

Should your copy of *The DISC!* fail to run at all, with error messages that indicate that your CD-ROM drive cannot read *The DISC!*, return the disc to the following address for replacement: The DISC! Replacement, CD-ROM Today, P.O. Box 29364, Greensboro, NC 27429. (Do this within the first two weeks after receiving *The DISC!* since supplies are limited.) Please indicate what error message you received when your drive failed to read *The DISC!*.

We would also very much like to receive your letters concerning *The DISC!*. While we cannot respond to each of them, they will help us serve you better in the future.

Viruses Need Not Apply

The DISC! is rigorously tested for all known computer viruses by one of the top CD-ROM disc duplicators in North America.

CHECK THIS OUT!

CD-ROM Today and *The DISC!* are meant to work together to bring our readers the first truly integrated print magazine and CD-ROM disc. Here are a few examples in this issue:

- PC users should look for reviews of Knowledge Adventure's new *Undersea Adventure* and *3-D Dinosaur Adventure* programs on pages 105 and 107, respectively, in this issue — and then play with interactive demos of both on *The DISC!*.
- Mac users can play with an interactive demo of Paramount's *Jump Raven* on *The DISC!*, and then turn to our review of the game on page 101.
- Hear the voices of Leonard Nimoy, William Shatner, and other cast members of the original "Star Trek" television series on Interplay's 90-meg interactive PC demo of the new CD version of *Star Trek: 25th Anniversary* — then read the review in this issue on page 97.
- Read the review of *Dr. T's Sing-A-Long Kids' Classics* music title for the PC on page 95, then turn to *The DISC!* for a special 5-song edition of theprogram — complete with CD audio!
- Mac and PC users can interact with the delightful demo of *Putt-Putt Goes to the Moon* on *The DISC!*, and then read our review on page 108.

Every issue of *The DISC!* is tied directly to the magazine — creating an interactive experience second to none!

STAR TREK: 25TH ANNIVERSARY

Interplay (PC demo only)

Interplay's *Star Trek: 25th Anniversary* was originally released on floppy disk, and became a hit title. Now, it's being released again as a CD-ROM game featuring the digitized voices of William Shatner, Leonard Nimoy, DeForrest Kelley, James Doohan, Nichelle Nichols, and others. What a multimedia difference it makes!

You play Captain James T. Kirk, and all of the old gang is on board — Bones, Spock, Scotty, and Uhura. The full version has seven different adventures for you to play. Thanks to Interplay, this premiere issue of *The DISC!* contains a completely playable first level — with all the voices.

For a review of the full title, turn to page 97.

Interplay Productions, 17922 Fitch Avenue, Irvine, CA 92714

The Enterprise bridge has something new in it – the digitized voices of the actual TV series cast members.

PICTURE FACTORY IMAGE SAMPLER

Photodex (PC and Mac demos)

If you've ever tried to find digital images from a long list of files, you'll welcome the simplicity and power of Photodex's *Picture Factory*. We've included a special 75-image sampler of the product that includes the Photodex Search Software which lets you search for images by their name. Want to see shots of space exploration. Just type it in, and up they'll pop. Or, you can browse through the photos yourself. Click on any thumbnail slide and it will automatically enlarge to a full-screen view.

With Picture Factory, you'll find any photo image you need – in seconds.

The complete *Picture Factory #1* includes more than 2,500 royalty-free, model-released photos, all of which can be exported to design, paint, and word-processing programs. Have fun with the 75 images here!

Photodex, 1781 Barcelona Street, Livermore, CA 94550

FROM THE FILES OF *MACFORMAT MAGAZINE*

MacFormat, **from Future Publishing, is Britain's most exciting new Mac magazine. Each month MacFormat editors give their readers a disc full of top-quality commercial demos, shareware, and freeware drawn from Mac software sources around the world. Here's a huge sampler of accessories, games, utilities, and much more from the *MacFormat* collection.**

SIMCITY 2000

Maxis (PC and Mac demos)

It started with *SimCity*....now rocket into the future and take charge of the space-age *SimCity 2000* in our Mac and PC interactive demos.

Control the power, the transportation and communication systems, and the zoning of your very own city. Build roads and railways. Develop industrial, commercial, and residential areas. Set policies for taxation, law enforcement, and emergency services. Every decision you make comes stunningly to life through the fascinating graphics of *SimCity 2000*. This fully interactive demo lets you play for twenty minutes (over and over again if you wish)—and that's long enough to get you hooked on playing the dynamic *SimCity 2000*.

(NOTE: You can save $25 off the recommended retail price of SimCity 2000 *for both PC and Mac versions. See page 53 for details.)*

Maxis, 2 Theatre Square, Orinda, CA 94563-3346

The stunning new SimCity 2000 *is a fascinating playground for Mac and PC users.*

THE WONDERFUL WORLD OF PUTT PUTT

Humongous (PC and Mac demos)

"*Putt Putt Joins the Parade* is an outstanding effort from Humongous Entertainment. [It is] truly educational...a game that children will find hard to put aside.

"*Putt Putt* entices children not only with its solid game play, charm, colorful graphics, and wonderful animations, but also by its excellent use of audio. This game provides a wonderful trip through one of the most pleasant towns you can visit on in the educational world of CD-ROM."

— Heidi E.H. Aycock, *CD-ROM Today*, Summer 93.

The Putt Putt series of edutainment titles has received rave reviews, and we've got interactive demos of two of them on *The DISC!*, including *Putt Putt Joins the Parade* and *Putt Putt Goes to the Moon* (reviewed in this issue on page 108.) We also have a demo of Humongous's *Fatty Bear's Birthday Surprise*, another delightful title.

Humongous Entertainment, 12930 NE 178th Street, Woodinville, WA 98072

Putt Putt Goes to the Moon is the latest in an excellent series for children.

PLAY, THEN PAY: THE SHAREWARE ETHIC

Shareware is a daring and imaginative method of circulating software to potential purchasers. It's an honor system that depends on YOUR sense of integrity.

Shareware developers use networks, BBSs, disc services, and CD-ROMs like this one, to distribute their products to the computing public. You get to try out each program on your own machine so that you can determine if it works for you, if it entertains or is helpful to you, and if you'll continue using it. If you do decide to keep a shareware program and get some real use out of it, then it's up to you to register with the original distributor. This usually involves printing out a form that came with the program and remitting a modest fee; often there's a phone number provided for use with credit cards.

There are many shareware programs, both in the PC subdirectories and in the Mac folders on *The DISC!*. They display how innovative and attractive this software can be — so, play fair. If you do like a program well enough to keep it, then register and pay the fee. Your support is vital if we are to see more of this exciting software. Besides, it's the right thing to do.

YOU TALK, WE'LL LISTEN

We're working to bring you the most interesting blend of entertaining, informative, and just downright useful software on every issue of The DISC!. Some of the programs are commercial demos, some are made available on a try-before-you-buy shareware basis, and many are free. But we want YOU to tell us if we're getting the recipe right. Is it to your taste? What did you like? What do you want to see more of on future discs?

If you'll take the time to let us know how you feel about CD-ROM Today's The DISC!, then we promise to take your suggestions to heart as we plan future issues. We appreciate your feedback — and want you to play a fundamental part in shaping future contents of The DISC!.

You can reach us at
America Online: cdromtoday@aol.com
FAX: 910-632-1165

or write to us at
The DISC!
CD-ROM Today
300-A South Westgate Drive
Greensboro NC 27407

SPECIAL OFFER!

By special arrangement, CD-ROM Today and The DISC! are able to offer its readers the full versions of some of the interactive demos you'll find on The DISC! – at savings at least 33 percent off the suggested retail prices. To take advantage of these special opportunities, see page 53 in this issue, or call 1-800-706-9500. (Canadian and foreign readers call (201) 670-3912.)

PLANETFALL

Activision (Mac version only; PC version on next issue of *The DISC!*)

This is the complete classic Infocom text adventure, a great game from the Golden Age of computer text adventures. Steve Meretzky, one of the most inventive game designers in the business, created this wacky puzzle-solving title, set aboard the space ship S.P.S. Feinstein.

If you've never played a text adventure, see *The DISC!* for details on how to play.

Mac users simply load *Planetfall* from the Entertainment folder on *The DISC!*.

Why *Planetfall* on *The DISC!*? It's the next CD-ROM game from Activision that will update an Infocom classic text adventure. And if it's anything like the success of *Return to ZORK*, we'll be standing in line to play it.

Activision, 11440 San Vicente Blvd., Los Angeles, CA 90049

WELCOME TO THE INFORMATION HIGHWAY!

You keep hearing about it on TV and radio. You see articles about it in newspapers and magazines. It's the digital superhighway. It's the future. But it's here right now. It's happening all around you even if you can't hear the traffic passing you by. Have you thought about getting involved in the Internet? Have you wondered what's in it for you?

The choices are simple — you've got no choice: Get up to speed now or become roadkill on the information highway.

If you join CompuServe, GEnie, America Online, or Prodigy, you have access to their well-stocked services. But on the Internet itself, you have access to an entire world of computers. Files galore, ready for downloading. Personal and professional contacts. Text, graphics, sound, video — there's a deluge of information to use to your advantage.

But finding these files can be hard. And some of them won't interest you. That's why we're including a selection on *The DISC!* We'll surf the Internet ocean in search of informative and exciting stuff, and we'll put it on the disc so you can get a taste of what's out there.

To use the Internet, you'll need an account that provides access. If you're in a company or an educational or government institution, ask your computer-administration people. If not, check your area for a local Internet service provider. Or PC users can try *WinNET Mail*, the easy-to-use Windows interface you'll find on this premiere issue of *The DISC!*

Once you're in, the possibilities are limitless. Join newsgroups, mailing lists, and hordes of professional societies and forums. Keep in touch, keep on top, make your business and your personal life grow. It's work, but it's fun and it can pay off big time.

Welcome to the Internet. Welcome to your future!

— Neil Randall and David A. Wade

DOOM 1.2 & WOLFENSTEIN 3-D

ID Software (PC shareware only)

ID Software has built a reputation for turning out the fastest, most action-packed PC games on the market, and *The DISC!* has examples of the best. First, thanks to ID, we're able to offer PC users the latest version of *Doom*, a blast-away demon-hunt that's sure to be on everyone's list for the best action game of the year. We have the shareware version of the game, as well as the shareware version of the earlier award-winning *Wolfenstein* 3-*D*, another action-game tour-de-force. In *Wolfenstein*, you shoot your way out of a Nazi dungeon.

Neither game is for the faint-of-heart,

The new Doom 1.2 shareware version is an action gamer's dream come true.

but at least it's easy to tell the good guys from the bad. If you've not had the chance to play either game, you'll be amazed at the fluid graphics, the 3-D perspectives, and the non-stop action.

In addition, on *The DISC!* you'll find a host of additional shareware maps, editors, pictures, sound files, and other goodies related to the games themselves. Have fun.

ID Software, c/o StarPak, P.O. Box 1230, Greeley, CO 80632 (Voice Order: 1-800-IDGAMES)

THE LIVING BOOKS

Broderbund (Mac demos only)

A delightful sampler from Broderbund's Living Books series is included on *The DISC!*. We have the Mac demos here, but the full packages are available for PC and Mac.

Here's what Carol S. Holzberg had to say, in the last issue of *CD-ROM Today*,

The Tortoise and the Hare is just one of the delightful Living Books Mac demos you'll find on The DISC!.

in her five-star review of *The Tortoise and the Hare*:

"The Living Books series from Broderbund is the standard by which all multimedia children's books are judged.

Mac readers will find four Living Books interactive demos — *Just Grandma and Me*, *Arthur's Teacher Trouble*, *The Tortoise and the Hare*, and *The New Kid on the Block*. The demos require a 256-color Mac with 4MB of RAM, and system 6.07 or higher.

Broderbund, P.O. Box 6121, Novato, CA 94948-6121

FINE PRINT...

The programs, demos, and other material included on *The DISC!* are provided on an "as is" basis, without warranty of any kind, expressed or implied. Should this disc or any of the programs on this disc prove defective, neither *CD-ROM Today* nor GP Publications assume any responsibility.

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COMING NEXT ISSUE – ON THE DISC!

- Special Surprise! — Limited-use version of a hot new productivity application.
- *Spectre VR* — Mac owners will love Velocity's demo of this futuristic tank battle game.
- Star Trek Shareware — Loads of special programs, images, and related shareware — Live long and prosper!
- Mac Classics — Some of the all-time best Mac shareware programs — dozens of them!
- Edutainment Roundup — Look for some of the newest and best edutainment demos available!
- ...And much, much more — hundreds of megabytes of great multimedia!

AT PRESS TIME....

Ch...ch...ch...changes are an inevitable part of putting together a massive CD-ROM. Here's an update, as we go to press, on a few of them.

- PC owners will get their chance to play the original *Planetfall* text adventure on the next issue of *The DISC!*.
- Psygnosis' *Microcosm* demo simply wasn't ready in time, so we're postponing that one as well for the PC.

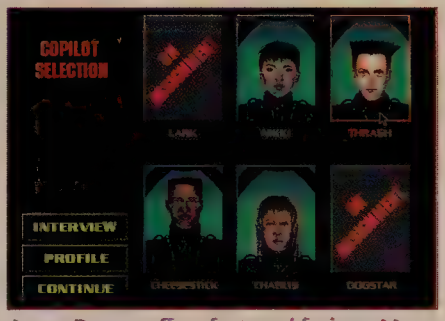
JUMP RAVEN & LUNICUS

Paramount Interactive/Cyberflix (Mac demos only)

The Cyberflix developers of *Jump Raven* and *Lunicus* have put together fluid graphics, excellent digitized voices and music, and interesting game scenarios.

Jump Raven is an action game of "ecocide" and survival set in a deteriorating neo-feudal New York City. *Lunicus* is a futuristic interactive movie with action and adventure, 5,000 movie sequences, and "cyber puppets" whose digitized voices are synched with their mouth movements.

Our demos of both games really show off what kind of sound and graphics the Mac is capable of. Plus, Paramount and Cyberflix have thrown in a trailer for a "wired Western" game that's scheduled for next Christmas. And we've included a few related extra files you can look over.



Jump Raven offers fast and furious Mac action.

For inquiries about the full versions of these games, call 415-813-8040.

Paramount Interactive, 700 Hansen Way, Palo Alto, CA 94304

THE SCIENCE FICTION AND FANTASY BOOKSHELF *(PC &Mac)*

Imaginative tales of speculation, fear, and wild imagination: classics by Jules Verne, E.A. Poe, and H.G.Wells... the works of Lord Dunsany... favorites by Edgar Rice Burroughs... and more. These stories are simply in a 'plain vanilla' ASCII format which you can view in any text reader or word processor capable of handling long files.

FLOW CHARTING 3*(PC demo)*

Flow charting is not just for programmers. Now it is essential to documenting, streamlining, and improving many processes and procedures. Patton & Patton's *Flow Charting 3* provides you with a no-nonsense, easy-to-learn approach to creating your own flowcharts. Try out this interactive demo, and see how quickly you can put this powerful tool to use.

AND EVEN MORE!

One of the great joys of a CD-ROM is that there always seems to be MORE that you can put onto it.

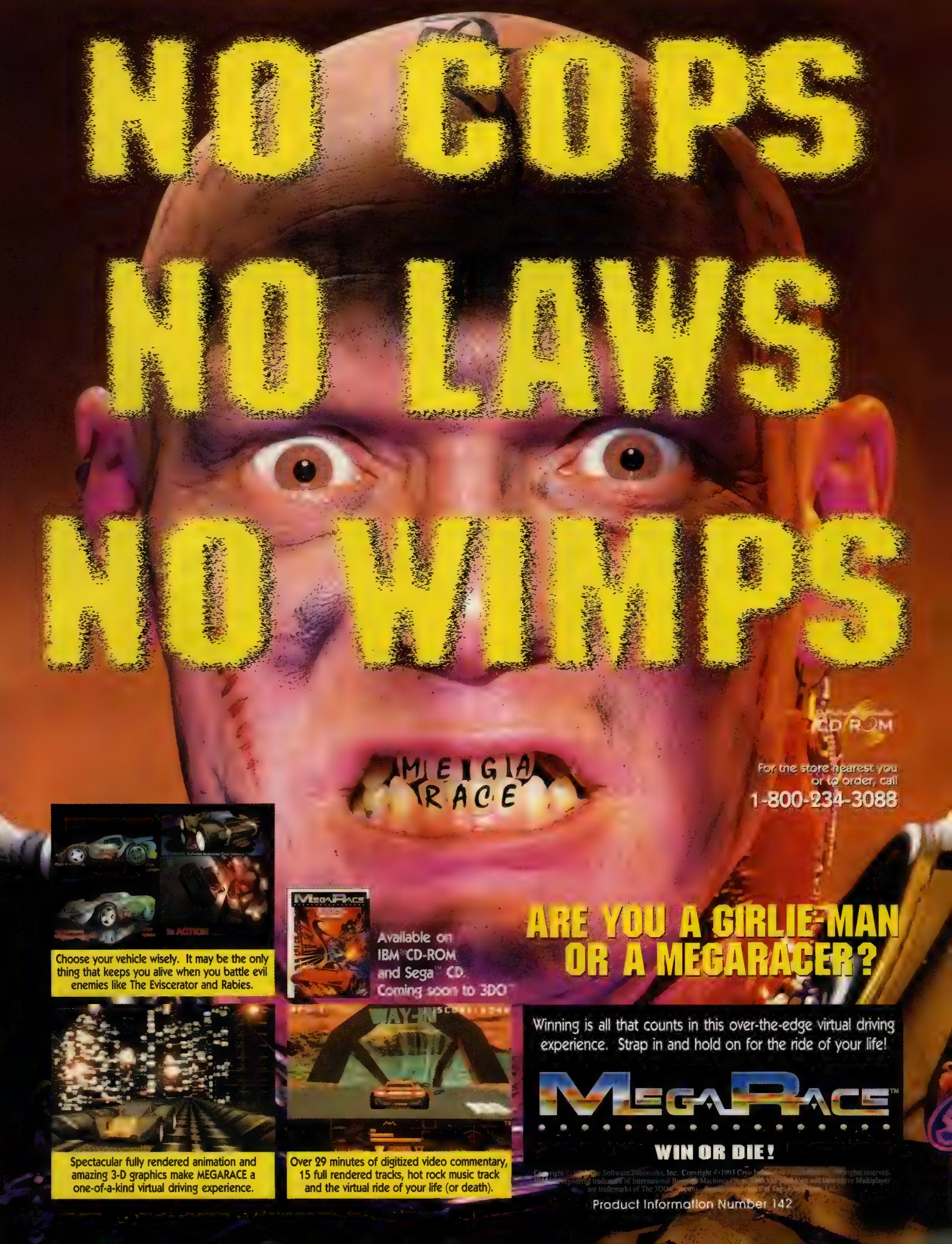
We've not even had a chance to mention that *The DISC!* contains an excellent interactive PC demo of Media Vision's delightful *Forever Growing Garden*, a CD-ROM game for children that let's them grow their own computer garden. It even grows when the computer is turned off!...

...Also, there's a beautiful Mac demo of Electronic Arts' *Labyrinth of Time*, with exceptional graphics and sound (more than 50 megabytes!)...

...And there are also two interactive PC demos from SSI – *Ravenloft: Strahd's Possession*, an AD&D fantasy role-playing game for CD-ROM (and floppy later), and *Dark Legions*, another CD-ROM title that is a mix of strategy and action...

...If we've missed something here in The DISC! pages, you'll find it ready and waiting for you on your CD-ROM disc. Have fun!

Media Vision's innovative Forever Growing Garden *is a child's fantasy garden on CD-ROM.*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Choose your vehicle wisely. It may be the only thing that keeps you alive when you battle evil enemies like The Eviscerator and Rabies.
Available on IBM® CD-ROM and Sega™ CD. Coming soon to 3DO™
ARE YOU A GIRLIE-MAN OR A MEGARACER?
Spectacular fully rendered animation and amazing 3-D graphics make MEGARACE a one-of-a-kind virtual driving experience.
Over 29 minutes of digitized video commentary, 15 full rendered tracks, hot rock music track and the virtual ride of your life (or death).
Winning is all that counts in this over-the-edge virtual driving experience. Strap in and hold on for the ride of your life!
MEGARACE™
WIN OR DIE!
Product Information Number 142

Now With Disc!

CD-ROM Today

Enters A New

Big News! *CD-ROM Today* is introducing an exciting innovation. Beginning with our April/May issue, every issue will include a fantastic CD-ROM Disc packed with leading-edge software. Imagine being able to read a detailed review of a new release inside the magazine, *and then being able to explore the software for yourself on your own machine.*

That's exactly what the new *CD-ROM Today* will allow you to do. **And, that's not all...** each issue, your *CD-ROM Today* disc will give you:

- ***Editorial Tie-Ins, working hand-in-hand with selected features inside the magazine***
- ***Exclusive interactive demos of exciting new software titles***
- ***Entertaining video clips, plus music and sound bites***
- ***Valuable reference material***

The DISC is compatible with both PC (DOS and Windows) and Macintosh systems. Just slip it in your drive and you're ready to go. **PLUS,** a section of the magazine itself will be devoted to explaining what's on the disc and how to get the most out of it.

How much will a subscription cost you? The entire package of **Magazine + Disc** is only $29.95 for six issues or **the best value of $49.95 for 12 issues.** We're sure this new package will add dramatically to the value our readers get from *CD-ROM Today*.

This is the multimedia age, and by integrating the CD, your magazine becomes a multimedia product at a fraction of the cost of a CD alone! One which will use print on paper to do the things that print does best, and CD-ROM technology to do the things it does best.

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One year/Canada: $59.95 US $ (includes GST). Other foreign: $74.95 US $.
Six months/Canada: $39.95 US $ (includes GST). Other foreign: $43.95 US $.
Single copy newstand price of *CD-ROM Today* is $7.95.

5RRC1

In Brief... HARDWARE

◆ Megamedia's two new upgrade kits (Mega T1 and T3) both begin with Toshiba SCSI-2 drives, Pro Audio Spectrum 16 sound cards (with SCSI interfaces), and magnetically shielded speakers. The T1 kit, which sells for $599, also gives you four CD software titles, while the T3 ($799) offers ten. Both kits meet MPC Level 2 specs and can be purchased through dealers or through Megamedia (800) 634-2633

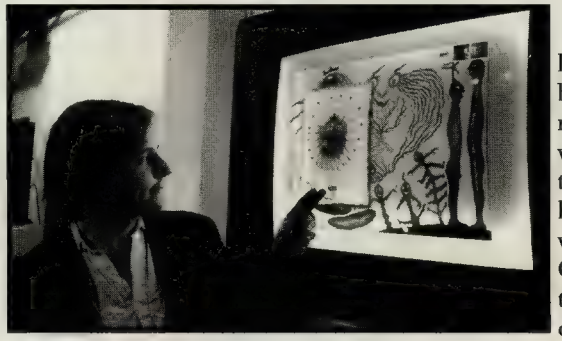
Gearing up with Megamedia

◆ Do you suffer from computer-induced eye strain? If your answer is yes, check out the *Computer Cap*. Developed by Design Product Enterprise, this shield sits on top of your monitor and blocks glare caused by extraneous light sources. To get the rest of the story, call D.P.E. at (510) 778-2285

◆ Elsewhere in this issue, Tom Benford takes an eye-opening look at CD-ROM drives. Here's a related news flash: Sony has dropped its price on its CDU-561 model, which is an internal SCSI-2 drive. The CDU-561 meets MPC Level 2 specs and has an access time of 295 msec. Old price: $459.95, new price: $349.95

Now Playing: The Future of Entertainment

"This is not a degree-granting program for 22 year-olds. This is Hollywood going digital in real time."
– Nick DeMartino, Director of Advanced Technology Programs, American Film Institute



An ATP participant regards the changing face of entertainment

Not all Hollywood deals are being made at Spago's and on backlots. These days, L.A.'s most happening place could be the American Film Institute. The reason? A series of seminars, the Advanced Technology Programs, concentrating on the film industry's new alignment with Silicon Valley. What goes on at these seminars can and probably will affect what you'll see on CD-ROM in the future.

Since 1991, when Apple Computer provided a million dollars worth of start-up capital, AFI has dedicated part of its focus to expanding computer-based technologies. AFI started with seven classes. Now, only two years later, they offer ninety.

Regardless of their backgrounds, interested parties can attend Institute programs and receive expert instruction in the same computer technology that intrigues CD-ROM users and dumbfounds movie audiences. The teachers are solid professionals with extensive credentials in film production and software development.

Harry Marks, for example, had nearly 30 years of broadcast-design experience under his belt when he began seeing the technological handwriting on the wall. Now he serves as Creative Director of the Advanced Technology Programs and teaches seminars as well. He credits timing and a growing public awareness for the program's success.

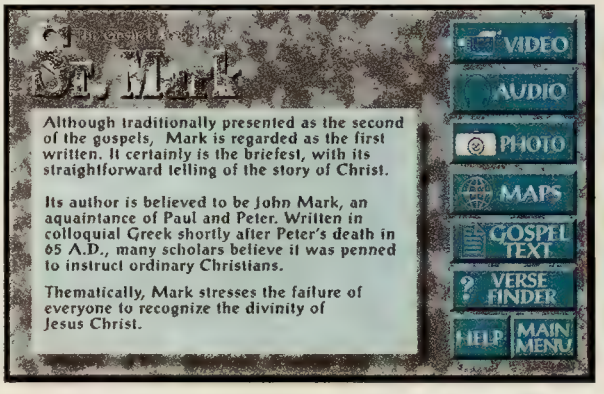
"I think this is the year that people will get it. There's a tremendous amount of talk and press about the digital highway. Even my mother is aware that something's going on," Marks says.

Classes come in two styles: standard lectures to groups of 50 to 100 students, and hands-on classes where 15 students at a

Toasting Cinerom

As we're all aware, MPEG technology is garnering a lot of attention. World Library is hoping this continues, particularly since its new subsidiary **Cinerom** is going to specialize in re-releasing **classic video footage** on low-cost MPEG-driven CD-ROMs. Through its partnership with Hollywood Select Video, Cinerom has publishing rights to long-time favorites like **The Three Stooges** and the **Our Gang** series and will sell the DOS discs for $9.99 apiece.

However, Cinerom's first release, *The Gospels, A Multimedia Bible Guide* will not use MPEG compression at all, but rather **SoftVideo**, another full-motion video playback technology. *The Gospels* ($49.95—MPC) contains nearly an hour of video and an hour of audio segments, along with the full text of the King James Bible, the Koran, and the Book of Mormon. Cinerom can be reached through World Library at (714) 748-7197.



The Gospels brings you old-time religion with a new twist

time gain experience at Quadra work stations. Favorite classes include those dealing with PhotoShop, image manipulation, and editing on a desktop computer. Perhaps most popular of all is a technology forecast called "The Cutting Edge," which is routinely standing room only.

Courses specifically dealing with CD-ROM development include "Basic Interactive Media: The Tools," which touches upon authoring environments, presentation formats, and custom CD-ROM tools, and "Interactive Products for Children," which explores in detail what

Hollywood's technology haven: The American Film Institute

goes into a successful kids' CD-ROM. Another class, "Interface Design," teaches the fundamentals needed for building an attractive and accessible front-end.

Almost as interesting as the course subject matter are the attendees — many from the neighboring dream factory. Some are "below-the-line" workers, like editors and cinematographers, keeping their job skills fresh in the midst of tremendous change.

Nick DeMartino, ATP Director, also sees many "players" around the classrooms, people traditionally more adept at pulling strings than pushing buttons. Remembering Hollywood's penchant for deal-making, it's little wonder that ATP sessions sometimes resemble business meetings.

"All kind of deals are cut at the break," DeMartino reports. "If we got five percent of everything that went down during our salons, we would never have to raise another nickel. I could cite you chapter and verse of actual contacts that have led to big business deals."

Celebrities also make appearances at the seminars and salons, and one film director has even proven to be a driving force within the project. James Cameron ("T2: Judgement Day," "The Abyss") co-chairs the AFI's Advanced Technology Council and, as his films clearly show, has a firm grasp of the subject. Harry Marks says "Cameron understands it probably more than anyone, because it's been his trademark. You know you're going to get stunning computer stuff in a Cameron movie."

Furthermore, Marks agrees

ATP director Nick DeMartino

that the AFI has a vested interest in public personalities like Cameron who can attract attention to AFI programs simply by attending them.

But what will this technological explosion mean for movies, besides rock-'em, sock-'em special effects? Quite a bit, according to Marks.

"A fellow from Sony Pictures was speaking of *In The Line of Fire* as one of the major special effects movies of the year. For the life of me, I couldn't figure out what special effects were in that movie, other than stunts. Then he showed us what they had done. It was unbelievable. They were generating crowds that weren't there. They were putting people in environments that weren't there. They hired 2000 extras and multiplied them into 12,000...and you didn't know."

These dazzling results could be very cost effective, too, limiting some of the need for extras, location shooting, and exorbitant budgets.

For the computer industry, this relationship could improve the narrative structure of software. Some software producers are realizing their need to have a better grasp on certain aspects of storytelling, aesthetics Hollywood has shaped for most of this century.

As for CD-ROM, Marks feels enthusiasm for a medium he feels is here to stay. "It's really a wonderful way of putting a lot of data on a relatively inexpensive medium, and it's a relatively indestructible medium, too. I don't know what else is that convenient, because it does other things. It plays music, it plays Photo CDs, it does a lot of stuff. I love it."

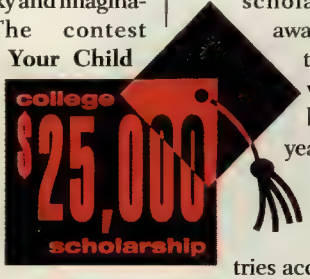
For more information about the Advanced Technology Programs, call (800) 774-4234. The American Film Institute, P.O. Box 27999/2021 N. Western Avenue, Los Angeles, CA 90027 (213) 856-7600 Fax (213) 467-4578

Express Service

Perhaps in response to the success of Tandy's Sensation! multimedia computer, Advanced Logic Research has come up with its own plug 'n' play machine. The ALR Multimedia Express comes loaded with 50 MHz of processing power, 4 MB of RAM, and software like *Microsoft Bookshelf*, *Where in the World is Carmen San Diego?*, *Great Wonders of the World, Vol. 1*, and *The San Diego Zoo Presents: The Animals*. Additionally, the Express contains a Wearnes double-speed drive, external stereo speakers, and meets both MPC Level 2 specs and Photo CD standards. $1995 gets you all this stuff plus a built-in Beethoven 16-bit audio card. *ALR, 9401 Jeronimo, Irvine, CA 92718 (800) 444-4ALR*

"Think, Junior...*Think!*"

Everyone knows that sending a kid to college takes money — big money. Now six companies, led by Electronic Arts, are doing something to help defray those costs, for two lucky and imaginative kids. The contest is called **"Does Your Child Have a $25,000 Imagination?"** and is being sponsored by EA*Kids, MindPlay, Morgan Interactive, Sanctuary Woods, EduQuest, and Future-kids, Inc. (an international learning center). The stakes are whopping...two $25,000 scholarships plus a slew of other prizes. The idea is to **harness kids' imaginations** to come up with arresting concepts that can be used in developing educational software. One of the scholarships will be awarded to a child in the 3-7 age group, while the other will benefit a kid 8 to 14 years old. The contest is running now **through June 30**, with straggler entries accepted through July 10th. For an entry form and contest guidelines, write to Electronic Arts, College Scholarship, 1450 Fashion Island Blvd., San Mateo, CA 94404.



In Brief... HARDWARE

◆ Wouldn't it be great if you could watch television all the time, even when you're using your CPU? That's the point of New Media Graphics'

PC meets TV with WatchIT! Pro

WatchIT! Pro, a tuner board that imports a TV signal from outside sources (cable, antenna) and displays it inside a window on your computer screen. The window is scaleable and can be relocated to another part of the screen. WatchIT! Pro sells for $595 and is controlled by an on-screen remote that looks like the real thing. Contact New Media Graphics at (508) 663-0666

◆ The Laptop That Roared: If the sound quality of your laptop presentations isn't up to snuff, perhaps you need to

*PC*MAX cranks up your laptop audio*

check out Gilltro-Electronics' PC*MAX. This tiny portable unit attaches to any standard parallel port and houses two internal speakers. PC*MAX even doubles as a recording unit with a built-in microphone. $200 gets you all this, and more. Call Gilltro-Electronics at (408) 727-6422.

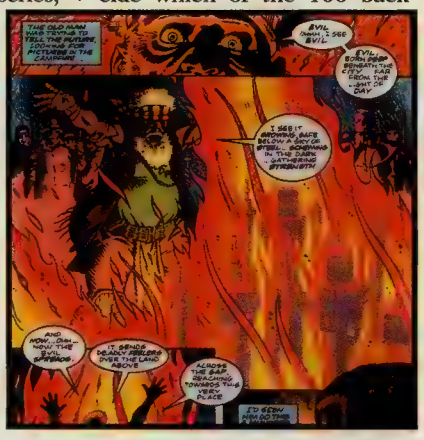
"A (Fill in Your Name Here) Production!"

Several new products can remove some of the start-up headaches from creating software presentations. **Interactive Media Corporation** has produced a $24.95 CD-ROM titled *Interactive Multimedia — Getting Started* that gives you a concise yet thorough overview of what you need to get started, including interactive tutorials, software tools, and a collection of clip media. There's also a try-out version of "Special Delivery," IMC's own authoring tool. IMC can be reached at (415) 324-2825. Meanwhile, for kids ages 10 and up, **Davidson & Associates**' *The Multimedia Workshop* ($79.95, for Mac) rolls three separate, but related, activities into one CD-ROM. "The Writing Workshop," a forum for editing and laying out documents, allows students to import photos and clip art from the program's libraries. "The Paint Workshop" contains tools and effects that aid in the creation of original art. In "The Video Workshop," kids can construct scenes and sequence them. For more info, call Davidson at (310) 793-0600. Finally, **Q/Media Software**'s *Q/Media for Windows CD-ROM* ($149) boasts a drag and drop interface and a 500-MB multimedia clip library. Additionally, users get access to Q/Media's "DigiClips," a set of animation, video, and voice clips. Q/Media can be reached at (604) 879-1190.

The Multimedia Workshop

Comic Strips...Live!

Comic books are coming to CD-ROM in a variety of ways. Last issue, we reported on Davidson & Associates' **CDROMIX** series, which uses sequential illumination to push the story along. Now **Virgin** has designed an interactive comic book where you portray and control the hero. *Beneath A Steel Sky* follows Robert Foster's exploits as he establishes a one-man resistance front to an invading force of evil stormtroopers. Virgin employed voice talent from the Royal Shakespeare Company and a "virtual theater" engine to bring the action to life. *Beneath A Steel Sky* (PC) carries a suggested retail price of $74.99. For the highly industrious and creative out there, **Putnam**'s *Comic Creator!* will let you call all the shots. You assemble your cast from 15 main characters (9 heroes, 6 villains), and then decide which of the 100 backgrounds to utilize. Finally, you choose one of the plot lines provided, or go off the menu and devise your own story. Available this summer for both MPC and Mac, *Comic Creator!* sells for $39.95.



Comics come to life in Beneath a Steel Sky

Real Support for ReelMagic

Sigma Designs' ReelMagic video board is picking up additional support among developers and publishers. Five more software titles are now ReelMagic/MPEG compatible: Software Toolworks' *20th Century Video Almanac*, Tsunami's *Man Enough*, Interplay's *Lord of the Rings: Enhanced CD-ROM*, ReadySoft's *Space Ace*, and Sierra On-Line's *Police Quest 4: Open Season*. Although Sigma expects these products to be widely available through standard retail outlets, they want to make sure that every ReelMagic user knows exactly what software is available. Thus, Sigma's new 800-number catalog, whereby users can call and order the latest MPEG-dedicated software. The catalog is shipping with every ReelMagic box. For more info, call Sigma Designs at their regular business number: (510) 770-0100.

The Shape of Press Kits to Come (Round!)

The **Electronic Media Kit Library** was designed so magazines could deliver their media kits on CD-ROM. The idea, championed by SRDS, makes sense: instead of inundating business contacts with smartly jacketed reams of paper and expensive glossy pics, create a CD-ROM with all of those unwieldy contents neatly contained within. The *Electronic Media Kit Library* simplifies this process with premade databases and other multimedia touches. With big publications like *The Wall Street Journal*, *Good Housekeeping*, and *Advertising Age* already testing the *Electronic Media Kit Library*, it makes you wonder if SRDS isn't onto something that could find countless other applications.

LUNICUS

They Stole Your Planet.
They're Trashing Your Country.
They're Going To
Kill Your Family.
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WASTE 'EM FAST!

You're one of the last free Earthlings left: your team on Moonbase Lunicus will have to save the world. Grab your cybersuit. Strap on the ol' plasma cannon. Jump in your shuttle and scream into the fire-fight of your dreams.

This lightspeed arcade movie brings you the best of both universes: butt-kicking action with CD-ROM intensity, and all of it with killer attitude! Hyper-real environments. Skull-crushing music-tracks. Kick droid-butt against tough odds that keep rising to match your skill. There's no waiting for anything, not even if you need to breathe.

It's a dirty job but somebody's got to do it.

GAME HALL OF FAME MACWORLD 1993

"FASTEST GAME ON CD-ROM."
-NEW MEDIA MAGAZINE

★★★★★ -MACHOME JOURNAL

"THE KING OF CD-ROM ADVENTURE GAMES."
★★★★½ -MACUSER MAGAZINE

AVAILABLE FOR MACINTOSH AND WINDOWS ON CD-ROM

CYBERFLIX

Paramount Interactive

Product Information Number 189

In Brief... HARDWARE

♦ Although you really can't use a CD without a PC, you can make your own CDs without a PC. It'll only cost you $10,000. Knowledge Access International has come up with a gizmo called, appropriately enough, the CD-MAKER, that lets you record your own discs. It's a two-piece setup, with a stacked controller and recorder that allows you to import data from any SCSI-based device and burn a ROM containing it. For more info, call Knowledge Access at (415) 969-0606

Burn, baby, burn: pressing ROMs with CD-MAKER

♦ If you're not satisfied with the current crop of 32-bit graphics accelerators, Orchid Technology invites you to step up to 64-bit processing. While 32-bit accelerators are only effective in certain display modes, the Kelvin 64 works in all modes. The Kelvin 64 uses linear addressing, allowing faster access to the on-board display memory. The Kelvin 64 comes in three configurations (VLB, PCI, and ISA) with each listing for $250. Call Orchid for more information: (510) 683-0300

♦ Let's face it, office furniture isn't always designed with computer users in mind. If you need plenty of space for extra desktop equipment, check out the 72" AnthroCart. Anthro's workstation is a full six feet wide, giving you plenty of room for that second computer and a host of peripherals. For details, call Anthro at (503) 241-7113.

Making Networks Work Faster

If you take part in a peer-to-peer network (like LANtastic, Windows for Workgroups, and NetWare Lite), Online Computer Systems wants to accelerate your access to applications. Their OPTI-NET Lite can speed CD-ROM accessing by up to 600 percent. OPTI-NET Lite uses a data cache to store frequently chosen applications in high-speed extended memory. One plus of using the program is that multiple users can share applications and data, without having to dedicate a drive for each network user. OPTI-NET Lite carries a suggested retail price of $179. *Online Computer Systems, 20251 Century Blvd., Germantown, MD 20874-1196 (800) 922-9204*

Convention Calendar

Lately there seem to be almost as many interactive conventions, expos, and tradeshows as there are software developers. Here's a partial list of upcoming events and where you can catch them. (The referenced phone number won't connect you with the actual convention site, but should help get you extra information about the event from the sponsor.)

- **Virtual Reality Entertainment Forum 1994**
  April 5-7
  Grand Hyatt Hotel
  New York City
  (212) 717-1318

- **New Media Expo**
  April 12-14
  Los Angeles Convention Center
  Los Angeles
  (617) 449-6600

- **COMDEX/Spring '94**
  May 23-26
  Georgia World Congress Center
  Atlanta
  (617) 449-6600

- **Multimedia 94**
  May 25-28
  Metropolitan Toronto Convention Centre
  Toronto
  (905) 660-2491

- **Interactive Media Festival**
  June 6-8
  Los Angeles Convention Center
  Los Angeles
  (800) 573-1212

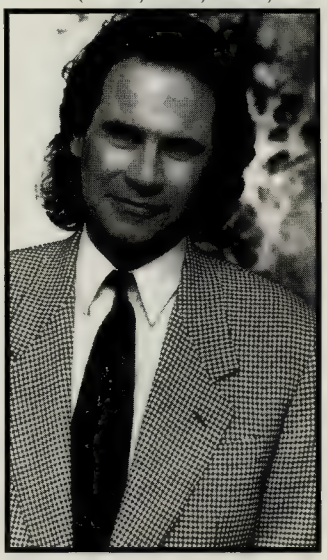
Wild, Wild Life

Survival Anglia's film library captures tigers...and more

Searching for wildlife footage? (Now there's an everyday question.) The WPA Film Library, which recently signed a deal with England's Survival Anglia, Ltd. has a new disc. Survival Anglia has been producing the wildlife TV series "Survival" for over 30 years. Their film library, all shot on 16mm stock, is reputed to be the world's most comprehensive wildlife collection. WPA plans to make extensive use of the 5000 hours of footage.

But Seriously Folks...

Sanctuary Woods hopes to broaden the ranks of multimedia users by aiming straight at the funny bone. Their new **I-laugh** line of CD-ROMs will concentrate on comedy, something to which most folks can relate. They've brought in **Dennis Miller**, stand-up comic and former "Weekend Update" anchorman from *Saturday Night Live*, to launch the first I-laugh title. *Dennis Miller: That's News to Me* (MPC, Mac, 3DO) lets



Dennis Miller yuks it up for Sanctuary Woods

Miller apply his barbed wit to current topics depicted in video clips. Other Miller ROMs (like *Dennis Miller That's Geek to Me*) are being planned, and they'll also sell for $29.95 for MPC/Mac and $39.95 for 3DO. Also in the works are a series of products created with another Sanctuary Woods partner — **Comedy Central**. The cable channel will give the software publisher access to shows it develops, for example, *Stand-up, Stand-up* and *Two Drink Minimum*. Sanctuary Woods' I-laugh line will present grown-up humor—ages 18 and up.

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Product Information Number 169

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Get a new KidSoft CD—with new demos, new Club News Video, and new activities—four times a year. That's four CDs for just $9.95. Or get a two-year subscription (8 CDs) for just $14.95.

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CD platform (check one only)
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Payment enclosed ☐ Bill me later ☐

Child's Name _____ (last) _____ (first)

Address _____ (street) _____ (apt. no)

City/State/Zip _____

Parent's Signature _____

Parent's Name _____ (please print)

Subscriptions to Canada and Puerto Rico add $6 per yr. Please remit in U.S. currency. Allow 6 to 8 weeks delivery. International orders call 1-408-354-6100 for shipping charges.

MAIL TO: Club KidSoft, 718 University Ave. #112 Los Gatos, CA 95030

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In Brief... SOFTWARE

♦ Licensed to Rom? ActiVision has leaked sensitive info about its upcoming espionage thrillers, namely that they've secured the consulting services of one William Colby. The former CIA Director will lend his covert expertise to an entire line of titles, the first of which should pop up on PC CD-ROM in early '95. We'd give you more information about this, but we're being followed

♦ There aren't too many TV shows that deserve their own CD-ROM, but The Honeymooners is one of them. MPI

Gleason and company come to CD-ROM

Multimedia has captured some of the seminal sit-com's best bits in *The Honeymooners' Funniest Moments*. Culling 48 scenes from the "Lost Episodes" (which sat in Jackie Gleason's basement for 30 years), the $29.98 disc will accommodate both Mac and Windows. You can reach MPI at (708) 535-1540

♦ The Art of Business sounds vaguely like a treatise on Eastern business techniques, but it's really the title of a new clip-art package from Masterclips. This one combines over 6000 artist-rendered images that fall within 100 different categories. *The Art of Business* ($260) features a keyword image browser utility and a chromatic converter utility which lets you change images from color to gray-scale and from color to black and white. All 6000 images are contained in both CGM and WMF formats. Masterclips can be reached at (800) 899-7440

Trek Check

If you're a **Trekkie** with a multimedia system and lots of time to burn, you'll be delighted to know that the CD-ROM industry has your interests at heart. In our review elsewhere in this issue, we look at **Interplay**'s *Star Trek 25th Anniversary Enhanced CD-ROM*, which samples audio clips from the entire Enterprise crew, including William Shatner and Leonard Nimoy. The DOS-formatted *25th Anniversary Enhanced CD-ROM* retails for $64.95. If, on the other hand, **The Next Generation** is more to your liking, **Spectrum HoloByte**'s *Star Trek: The Next Generation PC CD-ROM* presents a graphic adventure titled "Final Unity," which employs a space-flight simulation as players undertake a quest for the elusive Fifth Scroll. In *The Next Generation*, you can portray any of the seven main characters, depending on what the specific circumstances call for. Moving on to more Trek products, **Paramount Interactive** is readying another *Next Generation* CD-ROM, this one a reference manual of sorts rather than a game. *Star Trek Interactive Technical Manual: Enterprise D* takes you aboard Picard's vessel in extreme detail. Apparantly, Paramount can't get enough Star Trek, because they've also produced *Star Trek, Deep Space Nine: The Hunt*. Expect this role-playing adventure to feature more fully-developed personalities and a unique interface. Both Paramount titles will retail for $69.95 and be available this fall on Mac and PC.

Boldly going where two shows have gone before: Deep Space Nine

Making Book on CD-ROM

With Blockbuster Video test-marketing CD-ROMs, it should come as no surprise that other retail avenues are also being tried. **The Voyager Company**, for instance, is taking the **bookstore route**. In association with Apple Computer, Creative Multimedia Corporation, Discis Knowledge Research, Macmillan New Media, and Time Warner Interactive, Voyager is setting up kiosks in the bookstores of selected test sites (New York City, Denver, Southern California, Ontario, and London). At these booths, customers can browse through software, assisted by trained personnel. The Voyager Company no doubt hopes to expand the CD-ROM market while stirring interest in fresh titles like *A World Alive* and *Salt of the Earth*. *World* explores the animal kingdom and, interestingly, was produced by a 14 year-old. *Salt* re-introduces a classic documentary dealing with a 1950 strike by zinc miners in Silver City, New Mexico. Both new Voyager products carry a $39.95 SRP and will be released for the Mac (look for a Windows version of *A World Alive* in June).

Maneuvers

• **Broderbund** is joining forces with **Electronic Arts**. In a transaction valued in the $400 million ballpark, Broderbund shareholders will receive some 15 million shares of EA stock. In exchange, Broderbund will become a wholly owned subsidiary of EA. Broderbund will continue producing software as they have, which will still be marketed under the Broderbund label.

• **Interplay** is receiving some big money from **MCA**, which has interests in movies, music, book publishing, and even theme parks (MCA counts **Universal Studios** among its holdings). As things stand now, MCA has become Interplay's sole outside investor after purchasing a large minority share of stock. MCA plans to utilize Interplay's experience in its new Universal Interactive Studios unit.

• **Macromedia** goes public: Macromedia, known primarily for popular authoring tools like *Director* and *Action!*, recently offered over 2 million shares of common stock to the public, at $12 per share. The company will use the proceeds for working capital and credit repayment.

• **Sanctuary Woods** has received $13.1 million from the sale of 2.6 million shares of common stock to private investors.

• **CyberFlix**, developers of *Lunicus* and *Jump Raven* (reviewed in this issue), has licensed its "DreamFactory" software tools to its Japanese distributor **Bandai**, manufacturer of cartridge-based video games.

• **Activision** has privately placed 5 million shares of common stock, resulting in gross proceeds of $42.5 million.

Silly See-Deez

You may already be familiar with Discis' "Kids Can Read" series of storybooks. Now its new Kids Basics! titles are aiming at an even younger audience, children ages 2 and up. The first batch of four products sound a little silly: My Silly CD of ABC's, My Silly CD of Counting, My Silly CD of Colors, *and* My Silly CD of Opposites. *The Kids Basics! ROMs are multiformat, and retail for $29.95 each (or $35.95 for the supplemented Classroom Editions). For more info, call Discis at (800) 567-4321*

Learning the basics with Discis

Fewer $$$$$$ on CD-ROM

Graphics software developer **Corel** has launched *Corel GALLERY*, a visual clipart manager filled with **10,000 images** in more than 50 categories. The images can be dragged and dropped into amenable applications, including most word processing programs. The list price for *Corel GALLERY* is $129. Also, Corel has taken an interesting tack—selling certain CD-ROM versions of programs at lower prices, at least relatively speaking. By choosing CD-ROM versions of *CorelDRAW 3*, *CorelDRAW4*, and *Corel Ventural 4.2* over their diskette cousins, it's possible to save up to $200, depending on the software. Corel's president and CEO, Dr. Michael Cowpland, explains the pricing strategy this way: "CD-ROM production costs are lower than those of floppy disks and Corel is passing these savings on to our customers."

TurboTax Deluxe

TurboTax Deluxe on CD-ROM offers several tools to help you prepare and file your income taxes. The 1993 filing version of *TurboTax for Windows* (both Federal and state) is joined by J.K. Lasser's Your Income Tax, a popular reference manual; *TurboTax Planner*, a multi-year tax forecasting and analysis program; *TurboTax Savings Guide*, an interactive guide to tax tips and strategies; online IRS instructions and taxpayer information publications; and Marshall Loeb's Video Tax Guide. Street price for this complete package is around $60.

Chipsoft, 6330 Nancy Ridge Dr., Suite 103, San Diego, CA 92121 (619) 453-4446

The Bitstream 500

Want a font? Bitstream's *500 Font CD for Windows* ($49.95) contains typefaces in TrueType and PostScript Type 1 formats, as well as Bitstream's "Mini-MakeUp," a special-effects program for enhancing type. For Mac professionals, *TypeShop* offers more than 1000 PostScript Type 1 designs for typesetting applications. Since you're getting licensing rights, too, it makes sense that it costs more – $1089, to be exact. However, Bitstream is offering a short-term promotional price of $695. Call Bitstream for more details at (800) 522-3668

Storage Formats Through the Ages

Format	Year Introduced	Storage Capacity	Pro's	Con's	Place In History	Alternate Uses
5 1/4"	1976	92 KB – 1.2 MB	Thin, portable	More data can be stored in gnat's ear	Alongside horse and buggy	Oversized book mark
3 1/2"	1984	400 KB – 2.88 MB	Compact, portable	Sliding metal clip prone to bending – causing all hell to break loose	Trapped on floor behind computer work station	Coaster, straightedge
CD-ROM	1987	550 MB – 650 MB	Round, portable	Data erodes after only two or three millenia	Best thing since sliced bread	X-Mas tree ornament, frisbee
The Next One	Any Day Now	Generates additional memory as needed; limits uncomputable	Cubic, portable	Unable to move beyond concept stage	Will revolutionize business and human thought, thus creating global harmony	Generates soothing beta waves, pre-empts male pattern baldness

In Brief... SOFTWARE

◆ *Photomoods* collects 100 textured backgrounds for graphic design, layout, and illustration. The Mac program includes a slide show viewer for the PICT files, which can be exported and used without paying royalties. Call Shardonnay Audio Visual at (213) 913-1238 to find out more.

Background information: Photomood's *textures can be used royalty-free.*

◆ Videodiscovery, experienced in creating multimedia resource materials for school curricula, has established a Digital Products Division, with educational CD-ROMs to follow. Videodiscovery hopes to move to the head of the class with titles like *Science Sleuths*, to be converted from videodisc and geared toward middle school students

◆ MacMillan New Media's *Firefighter!* puts you in the boots of a veteran fireman as he tackles a series of house fires, brush fires, and building fires. The program features more than 45 minutes of video and audio, and sells for $49.95 (Mac, MPC). When you need to cool out, you can head for the 3-D firehouse and check out the latest in fire-taming apparatus. MacMillan New Media can be reached at (800) 342-1338

"Without a big brother, most startup and development stage companies simply won't be able to survive."

Steven P. Gesinger, vice president of L.A. investment banking firm Greif & Company, delivering a fairly bleak economic projection for entrepreneurs going it alone in multimedia

Attention: Speaker Seekers

Sound is a prime component of the multimedia experience. For those wanting to enhance their computer audio, two companies have new speaker systems at the ready.

If you're looking for that strong, full-bodied sound, **Reveal Computer Products** is hoping to please you with their RS380 speakers. With power rated at 80 watts (40 per speaker), you're certainly not going to have a problem **hearing** the RS380 system. Each shielded speaker sports a 4" woofer with a ducted bass port to add more oomph when it's needed, while 1 1/4" tweeters emphasize the high-end frequencies. The system (featuring front-mounted controls for power, volume, treble, and bass) includes an AC adaptor and sells for $179.

Reveal's RS380s pack 80 watts

On the other hand, if you don't need that kind of power, and you'd rather not fool with power outlets or batteries, perhaps **Audio-Technica** can help. Their ATUS speaker systems, also magnetically-shielded, are line-cord powered. Audio-Technica has two multimedia systems to choose from, one powered at 10 watts per speaker and another at 3.75 watts per speaker. The ATUS MMS557 (20 watt system) sells for $149.95, $99.95 for the MMS337 system (7.5 total watts).

Reveal Computer Products, Inc. 6045 Variel Ave., Woodland Hills, CA 91367 (800) 669-3559, Audio-Technica, Inc. 1221 Commerce Dr., Stow, OH 44224-1760 (216) 686-2600

Line-cord powered: the ATUS MMS557

NewsLine compiled by Phill Powell

Packard Bell Packs Up

Computer manufacturer Packard Bell has relocated its operations to a site in Westlake Village, California. Here's the new address and phone number: 31717 La Tienda Dr., Westlake Village, CA 91362 (818) 865-1555.

Accidents Will Happen

Last issue we snuck a peek at **Davidson & Associates'** CDROMIX comic books on CD-ROM. Unfortunately, we listed Davidson's FAX number. If you try **(310) 793-0600** instead, you'll pr obably get better results.

Introducing PC GAMER

The authoritative guide to PC gaming from the publishers of *CD-ROM Today*

Whether you've been playing PC games for years or are just getting started, **PC Gamer** is the resource you've been looking for. We'll bring you honest, hard-hitting reviews of all the lastest games — including the cutting-edge entertainment titles that are being developed for PC CD-ROM — so you'll know which ones are right for *you*.

But that's just for starters. In addition to the best reviews in the business, every issue of **PC Gamer** will feature:

- Extensive, in-depth previews of all the hottest new games – and interviews with the designers!
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- News on the latest trends and developments in PC gaming — and what they mean to you.
- Analysis of the latest gaming peripherals, from next-generation sound cards to the newest flight sticks and rudder pedals.

PLUS each issue includes an interactive demo disk that lets you play before you pay — and we're not talking about old games, either. Only PC Gamer gives you the chance to "test drive" some of the biggest, most eagerly awaited games on the market, each and every month!

Sound like the kind of magazine you need? Then call our subscription hot-line at **201-703-9505**, or fill out the form below. Or, if you prefer, check us out on the newsstands around April 26. We think you'll be impressed.

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5PGA1

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P.O. Box 29364, Greensboro, NC 27429
Fax: (910) 632-1165
Online: cdromtoday@aol.com

Home Schooling with Computers

I'm pleased to hear that software companies are now working with major textbook publishers to develop integrated products. Since first purchasing (and even touching) a computer six months ago, I am convinced by watching my daughters, ages 3, 4, and 7, that almost the entire primary educational curriculum should be computer based. It allows constant individual tailoring of the educational program to the level of the child while giving consistent rewards for progress and guidance to mastery of each step.

Located on the dining room table, our computer has become the new "hearth" of our family. I've purchased a couple of dozen programs to try and round out my children's "home" schooling. I'd like to see a whole curriculum teaching the basic "three R's" available at the consumer level, with optional modules to focus on supplementary areas such as music, art, social studies, and science, written at grade level. I don't trust the schools to get the results I'm seeing at home.

We all know the educational system nationally is failing in a large segment of our population. I think equal opportunity through computer access is the way of the future, but I can't wait. I want to do it now with my children at home.

Margaret Matthews, M.D.
Portland, Maine

♦ ♦ ♦

People Data

Do you know of anyone who makes a CD-ROM with population information and history of the cities and towns around the U.S.?

Harold Smith, Jr.
Lafayette, California

Yes and no. The latest U.S. Census (1990) is widely available on a variety of shareware discs, and you can probably find it on any number of online services. For example, you can find it on Desktop Bookshop, *one of the top ten shareware discs covered last issue (p. 54). As for a history of cities and towns, we'll see what comes down the pike. There are no titles we're aware of at the moment.*

♦ ♦ ♦

What Needs To Be Said

I fear that what I write may be an old argument, but I feel that something needs to be said. I realize that the Amiga has very little foothold in North America anymore, but to not even *mention* it when speaking of multimedia platforms is to me a great disservice to the computer and is also poor reporting. After all, the Amiga was the first consumer-level machine that offered multimedia capabilities long before Macs and PCs ventured into the realm. And today, a new generation of Amigas still provides the *most* cost-effective way of dealing with various media.

In your Spring issue, both your "New Frontiers" column and "3 Paths to Multimedia Nirvana" don't even mention the Amiga as a worthwhile alternative. Don't you realize that components like *Opalvision* and *NewTek's VideoToaster* make stunning technology available to computer users? TV programs like "SeaQuest DSV" and "Unsolved Mysteries" continually use Amiga Toaster 4000's in their development of SFX. Stores like K-Mart use Amiga's in their kiosks because of its multitasking and multimedia capabilities. So PLEASE do Amiga users a favor and quit reinforcing this *myth* that only PCs and Macs can do multimedia.

Brian Inthof
Kitchener, Ontario
Canada

We agree that the Amiga is an excellent multimedia machine. The objective of our magazine, however, is to cover the CD-ROM hardware and software market as it applies to PC and Mac users. We state this clearly on our covers.

There are a variety of magazines available for Amiga owners, and other broad-based multimedia magazines that cover Amiga-based technologies.

♦ ♦ ♦

Computing Has Wha...?

In your last issue, Lance Elko didn't finish his sentence at the end of his opening editorial. How much did we miss?

Eric Brinson
Seattle, Washington

Not much. The last sentence should have read "computing has never been this much fun." The final pages of the issue were headed to press while most of the magazine staff were at the CES trade show, preventing the usual last-minute checks.

Also, Eric, thanks for not pointing out the copy missing at the bottom of p. 51 in "The Shareware Salvo." David Wade wrote, "all of us are guilty of subscribing to the myth that shareware is." Here's what was cut: "...freeware. Check your hard drive right now. Have you registered that unzip program? Did you pay for that nifty little graphics viewer? Are you a legitimate owner of Castle Wolfenstein 3-D? See what I mean? If we don't reward the ingenuity of shareware programmers, the flow of imaginative, reasonably priced software will simply dry up. OK, having read the riot act, let's look at some of the top shareware CD-ROMs that offer you the biggest bang for your hard-earned bucks."

Sorry for the errors — but we're taking this up with the CES staff. They should know better than to slate a show when we're trying to ship a magazine.

♦ ♦ ♦

Editor's Note

CD-ROM Today reserves the right to edit letters for clarity and length.

HE'S HERE, ON CD-ROM

If you don't find him, he'll find you!

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Product Information Number 164

Call 1-800-898-8842 or visit your local retailer

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What You See Is What You Get

Look at any newspaper computer ad and you'll see the same fine print: *monitor sold separately.* You get the impression that the PC industry would rather not have to deal with monitors at all. Maybe it's because monitors are such low-tech devices. They're large, heavy, and power-hungry, the antithesis of what personal computers are supposed to be. It's almost shameful — in this solid-state age, here's a giant vacuum tube staring you in the face.

But whatever the rest of your computer is doing, you find out about it by watching the screen. A good monitor makes the rest of the system look better, and since it is sold separately, it's important to know the differences between a good monitor and a bad one.

The first thing you'll notice is that big ones cost more than little ones. A lot more. Windows has helped to popularize larger monitors by making it easier for programs to use high-resolution video, with most display cards offering at least 1024 x 768 video modes. While the card sets the resolution, a 15-inch or 17-inch monitor really shows off the extra details.

You'll also notice that the stated size of a monitor doesn't reflect its physical dimensions. Borrowing a trick from TV-set manufacturers, monitors are rated by the diagonal size of the picture tube, including the part that's hidden inside the case. With the usual black border, you're lucky to get a 10-inch wide picture from a 14-inch monitor.

Technically minded shoppers should note two other important monitor specs: *dot pitch* and *scanning rate*, both affecting how well the monitor displays high video resolutions. The dot pitch is simply the distance between the small red, green, and blue phosphor dots on the screen. Finer spacing gives a sharper picture, but also increases costs. That under-$200 SVGA monitor in the discount store with the huge .52mm dot pitch is a TV picture tube masquerading as a computer monitor. It might be OK for low-res DOS games, but even 80-column text looks awful on it. Real monitors start at .39mm, good enough for 640 x 480 VGA on a 14-inch monitor, but higher resolutions need either a finer pitch or a larger monitor. Small dot pitch gives a sharper display at any resolution, and top-notch monitors have a dot pitch of .28mm or less.

The horizontal scan rate indicates the number of lines being drawn on the screen each second, based on the vertical resolution and the frame rate of the video. While the video card sets this rate, it has to stay within the monitor's limits. To display 768 lines of video at a flicker-free 72 frames per second, a monitor must handle about 57,000 lines per second. That's beyond the range of bargain screens, but good high-resolution monitors have maximum rates of at least 64kHz.

That under-$200 SVGA monitor is a TV picture tube masquerading as a computer monitor.

You'll also run into something called *interlacing*, a trick to reduce the horizontal scan rate by drawing only half the lines on the screen at a time. It works fine for broadcast television but tends to cause images to flicker and jump on a computer screen, so it's best avoided.

Here's where you'll find differences between an OK monitor and a great one: non-reflective screen coatings to cut glare, better electronics for richer colors and stabler images, and microprocessor controls that remember setups so you don't have to recenter the picture when you change resolutions.

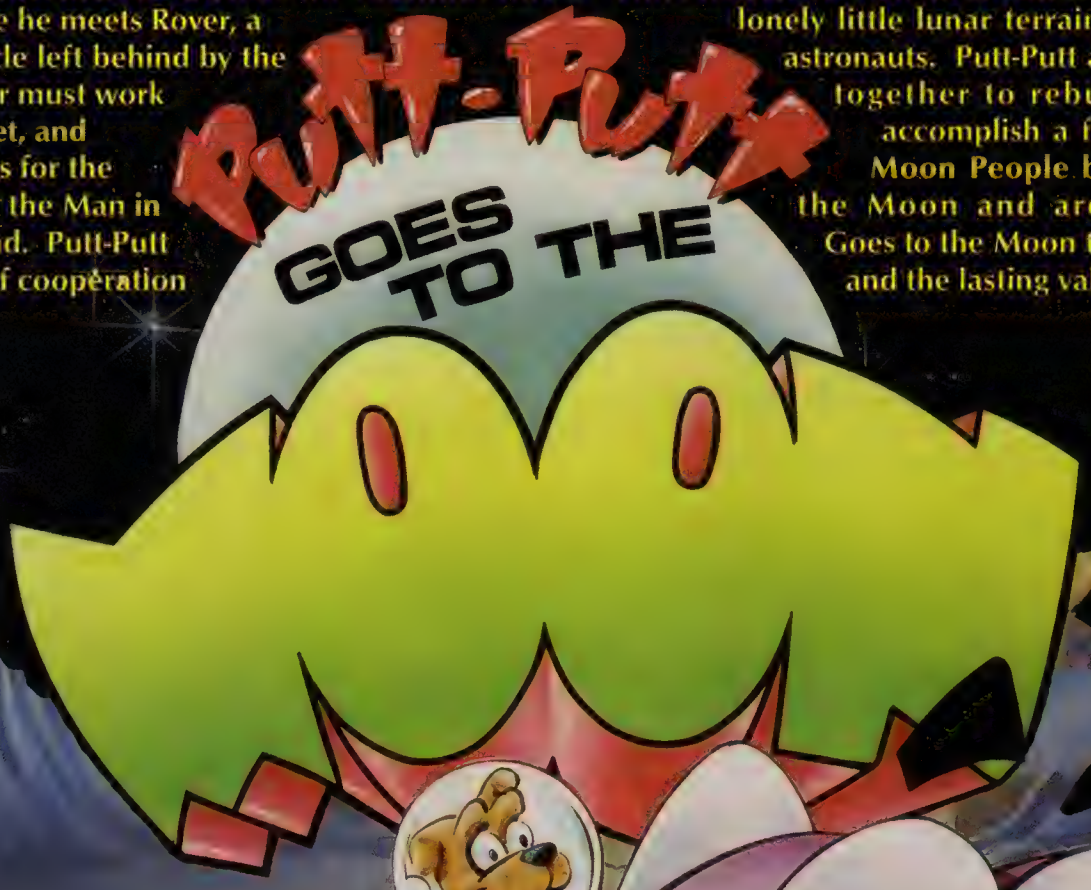
To risk sounding trite, seeing is believing. Top brands like NEC and Sony are safest, but you pay a premium for their names. There are plenty of excellent monitors from lesser-known companies. It just takes a little knowledge and careful shopping to separate the deals from the duds.

Tim Victor is a technology enthusiast who has worked as a writer and programmer, most recently as a graphics programmer for Hanna-Barbera Productions. He currently resides — with his guitar, mandolin, and assorted computer components — in Greensboro, NC. Email: timv@well.sf.ca.us.

Purple Car Lands on Moon!

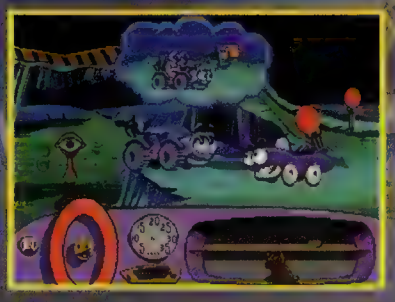
Check out our **FREE DEMOS** on the enclosed CD-ROM or visit us at Intermedia, booth #336

Due to a freak accident at the Fireworks Factory, Putt-Putt is blasted to the moon. There he meets Rover, a lonely little lunar terrain vehicle left behind by the astronauts. Putt-Putt and Rover must work together to rebuild a rocket, and accomplish a few good deeds for the Moon People before they meet the Man in the Moon and are homeward bound. Putt-Putt Goes to the Moon teaches the benefits of cooperation and the lasting value of friendship.



Ages 3–8

IT TALKS!



Wow! You were here with the astronauts?!?

Want to buy our rocket? It's for sale. Only 10 glowing moon crystals.

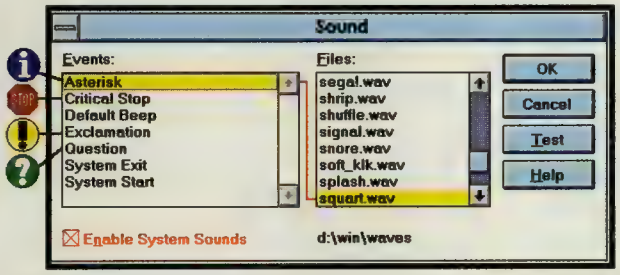
Hello! I'm Governor Moonbeam. And you must be?

HUMONGOUS Junior Adventures ENTERTAINMENT

What's Under Your Nose

Before you spend another dime on shrink-wrap and cardboard, take a minute to check out the multimedia goodies included free with Windows 3.1. These mini-applications are installed in your Accessories group, unless you've moved or deleted them since you first set up Windows. If you can't find them, here's how to rebuild the Main, Accessories, and Games groups. First, choose Run from Program Manager's File menu. In the box, type SETUP /P, then press Enter or click on OK. Existing groups may now have additional items, or you may see that new groups have appeared. (Note: Use WINSETUP /P with Windows For Workgroups 3.11.)

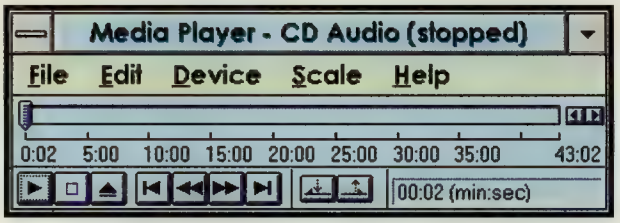
Let's assume you're using a sound card, but you haven't set up your sound effects. Windows allows you to attach sounds (stored as digital *waves*, with a filename extension of .WAV) to many Windows events. For example, when Windows starts, your speakers can announce *Welcome!* Yet Windows offers only a meager selection: CHORD.WAV, TADA.WAV, or CHIME.WAV. You can "roll your own" with your sound card and microphone, or obtain more from the huge public-domain .WAV libraries found on bulletin boards, online services, and on CD-ROM collections. Your sound card may have come with some, too.



Pick an event, such as an error message, then attach a sound effect to it. I've enhanced the dialog to place the warning and error message icons near the appropriate event.

Run Windows' Control Panel and double-click the Sounds icon. You'll see a list of Windows events (see figure). Choose an Event (such as System Start) and then click in the Files list, then click on the name of the .WAV file you want to use. Press Test to audition a sound — it's also a great way to browse your sound library. (If this whets your interest, consider the shareware program *Whoop It Up!*, or AristoSoft's *IconHearIt!* to add sounds to every conceivable Windows action.)

If your sound card lacks a recording/playback tool, rely on Windows' Sound Recorder accessory. You can record sounds (with a microphone), play any .WAV file, even warp the sound by speeding it up, slowing it down, reversing it, or adding echo. You can copy the sound into the clipboard and paste it into many applications, including popular word processors, so you can have talking notes embedded right in the middle of any document.



The new Media Player is an OLE 2.0 server, so you can embed multimedia clips in other documents and presentations.

The most amazing free accessory, Media Player, is an all-in-one multimedia control center with convenient VCR-like pushbuttons. It plays audio CDs, MIDI music, .WAV files, and even full-blown Video For Windows movies and other animations.

The powerful integration of applications and objects in conjunction with Media Player is surprisingly easy to use, and is the subject of next issue's column. We'll tell you how to add Video for Windows support if you currently lack it, and how to upgrade to the new version of Media player shown in the figure above. Using the clipboard and a word processor, we'll build a quick multimedia application that's surprisingly easy to set up (and lots of fun, too).

Charles Brannon, a former program editor for COMPUTE Magazine and project manager for Epyx, he now supervises a Novell and Windows for Workgroups network, and works as a freelance writer and consultant. Email (CompuServe): 70720,462.

You Say You Want a Revolution

Revolutions are always painful, and the revolution that the Macintosh world is about to experience will likely be no exception. This year the Mac takes the biggest step in its ten-year history. Apple is changing to a new computer architecture based on the PowerPC family of chips jointly developed by Motorola, IBM, and Apple. The first PowerPC Macs, called PowerMacs, will run faster than PCs based on Intel's Pentium chip, but are expected to cost less. PowerMacs are now about to ship. By the end of the year, if all goes well, every Mac sold by Apple will be a PowerMac.

PowerMacs have the right stuff to drive the development of a new generation of CD-ROM software.

The success of the PowerMacs depends on having enough native software to run on them — and therein lies the pain. Regular Mac software, including CD-ROMs, will run on PowerMacs at current Mac speeds (with a Windows emulator, they will run MPC CD-ROMs, too, at 486 speeds), but only software written specifically for the PowerPC chip will really burn rubber. All major Mac developers have jumped on the PowerPC bandwagon; still, it will be months before the software is in place. No one is saying how much software upgrades will cost, either. CD-ROMs that fully exploit PowerMac technologies, including the host of new multimedia capabilities that Apple plans to deliver, will also be a while in coming.

But the promise of a new day in Mac computing is worth the painful wait. Many of the PowerMacs will have the exceptional audio-visual abilities of the Quadra 660AV and 840AV. They'll include integrated video capture and output, 16-bit stereo sound, Apple's voice-command and voice-synthesis technology, and high-speed networking. Also expect a new version of QuickTime that can display full-screen digital movies at up to 30 frames per second, finally opening the door wide enough to feature-length QuickTime films on CD-ROM. Escher, a system software extension, will handle 3-D objects in real time. By year's end, a new line of multimedia PowerMacs (code-named TNT) will reportedly match the graphics performance of Silicon Graphics workstations. The TNTs will clock up to 150 MHz and boast a new, fast peripheral bus and a next-generation SCSI port for connecting the speedy CD-ROM hardware of the future.

Early PowerMacs will also ship with an optional new CD-ROM drive, the AppleCD 300 Plus. An internal version of the Plus, which is based on a dual-speed NEC mechanism, will be bundled for about $200, making it the best-ever deal on a Mac CD-ROM drive. While the Plus will sport throughput performance nearly equal to the Apple CD 300 drive it replaces, it will also offer smoother game play and video playback because it can seek data asynchronously. The Mac will be free to decompress and display images on the screen while the drive looks for more data — no more waiting while your game loads the next screen.

What all this means for Mac CD-ROM users is that the PowerMacs will have what it takes to drive the development of a new generation of CD-ROM software. PowerMacs will be able to do the kind of multimedia we've always wanted: full-screen, feature-length movies; fully integrated video and computer graphics; 3-D "cyberspace" visuals supported directly by system software; symphonic sound without a sound board; CD-ROMs that talk with you, not just at you; fast networking and serial links for multi-player games and edutainment; and the raw speed to react instantly and fluidly to any command.

Raw speed is the name of the revolution coming to the Macintosh world. The one we've all been waiting for.

Steven Anzovin is the author of three Mac multimedia books. An expanded edition of his book about computing and the environment, The Green PC *(Windcrest/McGraw-Hill), is due this summer. Email: Anzovin@AOL.COM.*

ShareWare x 2

It had to happen — sooner or later someone was bound to carry the shareware distribution philosophy to its logical conclusion and issue a shareware CD-ROM itself on a try-before-you-buy basis. Coyote Data has done just that with its initial release of the Oasis Shareware CD-ROM. The deal works like this: you can order a copy of the Oasis collection by calling Coyote Data direct at 800-451-7093, paying only $6.95 to cover production and shipping costs; then, if you like it and intend to continue using the disc, you're asked to send in a registration fee of $24.95.

Tor Hough, president of Coyote, isn't too concerned that users will welch on paying the registration charge: "We are certain that people will enjoy and use this collection — it'll be easy for people to see that their $24.95 is money well spent."

The interface is somewhat less exciting than the publicity blurb claims, but it is robust and functional enough to allow the user to browse the disc easily and download selected files. The *Oasis* compendium includes 6700 programs organized into 200 categories. It's an up-to-date and comprehensive assortment with a "something for everyone" approach, strong in several esoteric areas, although woefully lacking in games and rather weak in the Windows department. Still, given the disc's shareware method of distribution, it's well worth a try. Now that Coyote Data is testing the waters, can it be long before other distributors follow their lead?

Get Organized

In my feature last issue ("The Shareware Salvo," p. 51), I mentioned the trickle-up effect that successful shareware products have as they "go commercial." The Time & Chaos organizer (available on the CICA Windows CD-ROM and several other discs), which I singled out in the article as one of the best PIMs operating under Windows, is being marketed now as *The Computer Organizer for Windows* ($29.95 from Impusle Software at 214-437-2849). It deserves the good press it's been getting.

MacShare Book with CD-ROM

There's so much good shareware in circulation now that new books have to come with a CD-ROM tucked inside in the front cover. Clay Andres' *The Little Mac Toolkit* ($34.95; Peachpit Press; 510-548-4393) is a 550-page manual that accompanies the large collection of dandy Mac utilities ready to download from the CD-ROM.

The author gives commendably clear and concise instructions for using the more than 120 programs he's gathered, including system, Finder, disc, keyboard, virus protection, and compression programs. The Powerbook tools are most useful for on-the-go users. And there's also a large variety of games, fonts, icons, and sound effects. Nothing startlingly new for Apple veterans, but it's an indispensable collection for anyone starting out on the Mac.

Just the FAQs

Open up the new *SoftwareVault Collection #2* (American Databankers Corp., 800-775-4232) and you'll find a 560-meg bonanza of shareware material, including an impressive array of Windows programs. The collection of TT fonts, WAV files, and icons crammed onto this disc alone would justify the price.

There's also a very useful compilation of FAQs downloaded from the Internet. You'll need these if you're taking your first tentative steps out onto the Digital Highway. FAQs are Frequently Asked Questions, together with their answers, organized by topic —some of which are quite intriguing. It's only good form, or "netiquette" as it's called, to read the FAQs covering your areas of interest so that you don't annoy more experienced infonauts with dozens of mundane beginner's questions. Having a large selection such as this available to you on CD-ROM allows you to browse through them at your leisure; but the most recent ones, of course, are those available online.

David A. Wade, former freelance journalist, film reviewer, and adventure novelist was bitten by the shareware bug in the early 1980s. Email: cdromtoday@AOL.COM.

The Industry Is Calling Them "The Year's Hottest in Multimedia"

Infotainment...
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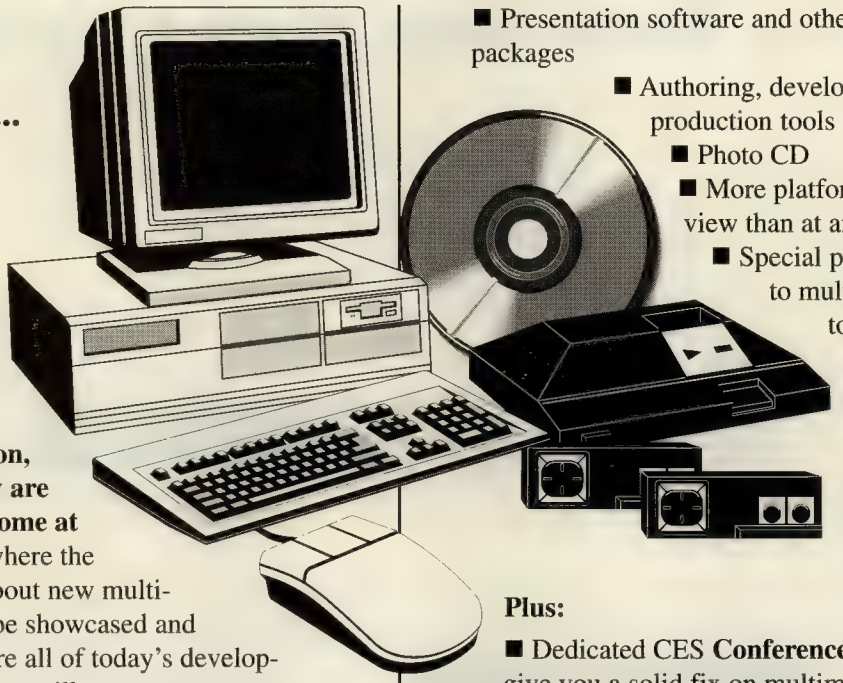

1994's winners in profit-making software and hardware for playback, production, imaging and display are discovering a new home at Summer CES! It's where the year's most-talked-about new multimedia products will be showcased and introduced. And where all of today's developers, vendors and buyers will converge to create and capitalize on a new generation of opportunities—in time to make 1994 more profitable. Sounds. Images. Actions. It's all at Summer CES, the multimedia event of the year. Make sure you're there!

'94's Biggest Multimedia Technology Payoffs In:

- Electronic gaming
- Multimedia and desktop video software and hardware
- Educational software
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- More platforms will be on view than at any other show!
- Special pavilions devoted to multimedia, desktop video, Apple, Windows, virtual reality, DSS/DBS satellite systems and services, and more.

Plus:

- Dedicated CES **Conference Tracks**—to give you a solid fix on multimedia's growth potential.
- **Two concurrent professional conferences**: The Information Highway Service and Content Developer Conference; and the Interactive Advertising Conference.
- **Keynote speakers** Minoru Arakawa and Howard Lincoln of Nintendo America.

To register, call Fax-on-Demand at 708-991-9475. You must use the phone attached to your fax machine.

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PCC

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OTHER GAMES MAY TALK.
THIS ONE HAS A VOICE.

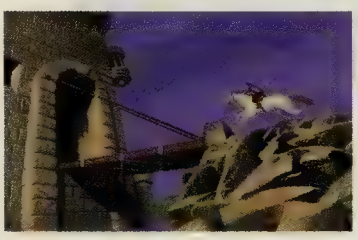
Star Trek: The Next Generation's

PATRICK STEWART

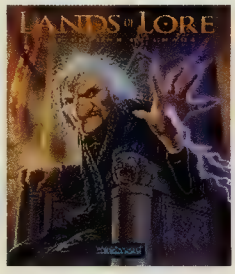
in

LANDS OF LORE: *The Throne of Chaos*

With Patrick Stewart as the voice of King Richard, *Lands of Lore* has a royal advantage over other fantasy games: An actor of real authority in a role of authority, at the head of a huge cast of heroes and villains who speak, rant and roar their way through the most vocally interactive role-playing adventure yet devised. (A mammoth 130 MB of digitized speech makes it possible.)



The Dark Army is on the move, led by the shape-shifting sorceress Scotia—and each time you meet her she'll be more powerful and terrifying than the last. But your powers can grow, too. Experienced-based character development makes great warriors of those who take arms (in real-time combat) against a sea of indescribable monsters and makes mighty wizards of those who cast Larger-Than-Life spells. Explore ancient castles, living forests, hidden lairs, bustling towns, haunted caverns, through 30 enchanted levels made vividly real by more than 20 MB of compressed art and special effects.



For the PC CD-ROM

Westwood™ STUDIOS

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Product Information Number 138

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Double-Speed CD-ROM (And More!) Drives

A Buyer's Guide

Tom Benford

Moved up to a double-speed drive yet? If not, it's about time. This guide offers solid advice on what to consider before buying, and looks ahead to the next generation of CD-ROM drives.

The desire for more speed in everything we do is a natural byproduct of the time we live in, and CD-ROM drives are no exception. While just a couple of years ago a CD-ROM drive with an under-500 ms access time, a 16KB buffer, and a sustained data rate of 150KB per second was the cat's meow, a drive with specs like that just doesn't cut it anymore. Double-speed drives are the way to go, and that's exactly what we're looking at in this article. But before we go any further, it might be a good idea to answer one important question: *What is a double-speed drive, anyway?*

The term "double-speed" refers to the actual rotational speed of the drive spindle — that's the mechanism that engages the hole in the middle of the disc and causes it to rotate; *double-speed* also refers to the transfer rate of data from drives which fall under this designation. Essentially, the disc is spinning at twice its normal speed, thus making the transfer of data from the disc to the host computer twice as fast.

The standard (or *single*) speed rating for CD-ROM drives is 150KB/second. This standard was established to conform the drives to audio (Redbook) data-transfer rates, which require 150KB/second for music to play back faithfully as it was recorded. Since virtually all CD-ROM drives also have the ability to play audio CDs,

ILLUSTRATION BY EDWIN C. MALSTROM

it was (and is) essential to preserve the 150KB/second transfer rate to keep this audio-play ability. Unfortunately, 150KB/second is just too slow to move the vast amounts of information required for today's multimedia applications. The solution, then, was to increase the data-transfer speed for moving text, graphics, and video information from the disc to the CPU while still maintaining the 150KB/second rate for audio uses.

For a plethora of engineering reasons, the easiest and most practical method of increasing this transfer rate was to incorporate a speed-doubling mechanism in the drive which would "shift" the drive into high-gear (double-speed) for data transfers, and kick it back into low-gear for playing audio CDs, and that's how the term *double-speed* came about.

The rule of thumb to remember is: the higher the transfer speed, the smoother the data flow will be. Data-transfer speeds are always represented in kilobytes-per-second; the higher the number of KB/S, the better the drive performs.

Media Vision's portable Reno drive offers one of the fastest access times available (180ms).

OTHER FACTORS ABOUT SPEED

Access Time

In addition to having a fast data-transfer speed, it's also highly desirable to have a low access time on a CD-ROM drive. Access time is how long it takes from the time the "fetch data" instruction is given to when the location of the data is actually found on the disc and the transfer begins. This access time is always represented in milliseconds.

To help put things in perspective, a 200ms access time for a double-speed CD-ROM drive is exceptionally fast, with 300ms being about average; an average IDE hard drive, however, will typically have an access time of well under 20ms. Viewed in that context, a 200ms CD-ROM drive is considerably faster than a 300ms drive, yet excruciatingly slow compared to a hard drive.

When comparing access-time ratings, remember that the lower the number, the

MANUFACTURER	DRIVE MODEL	FORM FACTOR	INTERFACING	ACCESS TIME	BUFFER SIZE	TRANSFER RATE	DISC SERVING	MSRP	FEATURES
Media Vision	Reno	external portable	SCSI 2	180ms	64KB	306KB/sec.	top-loading	$399	AC or battery powered standalone audio
Pioneer	DRM-602X	ext. 6-disc changer	SCSI 2	300ms	256KB	307KB/sec.	6-disc mag.	$1.095	holds 6 CD's simultaneously
Toshiba	XM-4101B	internal	SCSI 2	320ms	64KB	300KB/sec.	drawer	$320	sealed mechanism with built-in lens cleaner
Toshiba	TXM-4101L	external	SCSI 2	320ms	64KB	300KB/sec.	drawer	$410	
Toshiba	XM-3401B	internal	SCSI 2	200ms	256KB	330KB/sec.	drawer	$510	
Toshiba	TXM-3401E	external	SCSI 2	200ms	256KB	330KB/sec.	drawer	$640	
Toshiba	TXM-3401P	external portable	SCSI 2	200ms	256KB	330KB/sec.	drawer	$925	
Apple	AppleCD 300	external	SCSI 2	295ms	256KB	300KB/sec.	caddy	$419	auto lens cleaning, double front-loading door
Apple	AppleCD 300i	internal	SCSI 2	295ms	256KB	300KB/sec.	caddy	$319	
Procom Technology	ICD-MX	internal (Mac)	SCSI 2	200ms	256KB	330KB/sec.	caddy	$549	accepts 12cm or 8cm diameter CDs
Procom Technology	macCD/MX	external (Mac)	SCSI 2	200ms	256KB	330KB/sec.	caddy	$649	
Procom Technology	SiCD-DS	internal	SCSI-2	200ms	256KB	330KB/sec.	caddy	$915	
Procom Technology	MCD-DS	external	SCSI-2	200ms	256KB	330KB/sec.	caddy	$665	
Mitsumi	CRMC-FX001D	internal	proprietary	250ms	32KB	307KB/sec.	drawer	<$300	long-life brushless motor, dust sealed
NEC	MultiSpin 74-1	external	SCSI 2/SCSI 1	280ms	256KB	300KB/sec.	caddy	$550	double dust doors, auto lens cleaning

better (as opposed to data-transfer speed, where the highest number is most desirable).

Buffer Size

Think of a buffer as a temporary holding area, where data is stored until it's needed. All CD-ROM drives are equipped with built-in buffers that are used for data streaming to keep a smooth and continuous flow of data going to the host device at a constant rate of speed. The MPC Level 2 spec calls for a minimum buffer size of 64KB, although many double-speed drives offer 128KB or 256KB buffers. The larger the buffer, the better the drive can handle even the most strenuous multimedia data-transfer demands; however, the drives with larger buffers usually come with the highest price tags, too.

The DM series from Plextor (formerly Texel) is aggressively priced.

OTHER CONSIDERATIONS IN CHOOSING A DRIVE

Interfaces

Most of the drives covered in the comparison chart use a SCSI (Small Computer Systems Interface) interface and conform to the SCSI 2 spec; others use proprietary interfaces. The latter group of drives doesn't offer any appreciable advantage in speed or access time over SCSI models, although some makes and models (e.g., Sony, Mitsumi, and Hitachi) can mate with the integrated interfaces found on many popular sound cards, thus saving a slot in the PC usually required for an interface card; these proprietary models are also usually less expensive than the equivalent SCSI-interfaced models.

A SCSI interface has some significant advantages over a proprietary interface. First, a SCSI drive can be used with equal ease on an IBM-compatible or a Mac, as well as a Sun workstation and many other architectures. (Since all Macs have a built-in SCSI interface, a proprietary-interfaced drive won't work.) Second, you have a wider selection of SCSI interfaces and interfacing options to select from than drives which are married (for all practical purposes) to their proprietary interfaces. This is a particularly important point to consider

MANUFACTURER	DRIVE MODEL	FORM FACTOR	INTERFACING	ACCESS TIME	BUFFER SIZE	TRANSFER RATE	DISC SERVING	MSRP	FEATURES
NEC	MultiSpin 84-1	internal	SCSI 2/SCSI 1	280ms	256KB	300KB/sec.	caddy	$615	double dust doors, auto lens cleaning
NEC	MultiSpin 38	external portable	SCSI 2/SCSI 1	400ms	64KB	300KB/sec.	top-loading	$465	AC or battery powered
Chinon	CDX-535	external	SCSI 2	220ms	256KB	300KB/sec.	caddy	$795	double dust doors, 32-sector data transfers
Chinon	CDS-535	internal	SCSI 2	220ms	256KB	300KB/sec.	caddy	$645	
Chinon	CDA-535	external (Mac)	SCSI 2	220ms	256KB	300KB/sec.	caddy	$795	
Sony	CDU-561	internal	SCSI 2	295ms	256KB	300KB/sec.	caddy	$349.95	auto lens cleaning
Sony	CDU-7811	external	SCSI 2	290ms	256KB	300KB/sec.	caddy	$529.95	
Sony	CDU-33A	internal	Sony proprietary	320ms	64KB	300KB/sec.	drawer	$199.95	direct interface with many popular sound cards
Hitachi	CDR-1900S	external	Hitachi proprietary	260ms	128KB	307KB/sec.	caddy	$855	double doors, auto lens cleaning
Hitachi	CDR-1950S	external	SCSI 2	235ms	256KB	307KB/sec.	caddy	$855	
Hitachi	CDR-6700	internal	Hitachi proprietary	260ms	128KB	307KB/sec.	caddy	$775	
Hitachi	CDR-6750	internal	SCSI-2	235ms	256KB	307KB/sec.	caddy	$795	
Plextor	DM-3028	internal	SCSI-2	240ms	64KB	335KB/sec.	caddy	$329	dust proof door, auto lens cleaning
Plextor	DM-5028	external	SCSI-2	240ms	64KB	335KB/sec.	caddy	$439	

Note: All drives listed except the Mitsumi CRMC-FX001D are at MPC Level 2 spec. Also, all drives are multisession PhotoCD compatible.

The latest from Toshiba — the XM-4101 series — is targeted to mid-range computer users.

integrated into an appropriate sound card) MicroChannel machines; these drives can't be used with Macs.

Disc Serving

Another point to consider before you buy is how the disc is inserted into the drive. Many drives use caddies, which offer a high degree of protection to the disc. Caddies are also handy for keeping your most used discs ready for immediate use. Of course, you'll have to purchase them at $5-$10 each.

Some drives have a slide-out drawer which accepts the disc (as with most audio CD players), and others (the portable models) have lift-lids which permit placing the disc directly on the drive spindle. These drives offer some economy since you won't have to purchase additional caddies; the downside is that you'll have to handle the discs more carefully to avoid scratching them. Generally speaking, there isn't any transfer-speed or access-time advantage directly related to the disc-serving mechanism, so the points to consider are ones of economy and care.

The Pioneer DRM-602X (and its quad-speed brother, the DRM-604X) is unique in that it uses six-disc magazines rather than drawers or caddies to hold six CD-ROMs simultaneously, serving each one at a time as needed; each disc is assigned a logical letter identifier as if it were a separate drive. The whole system works remarkably well, too.

The XM-3401 series from Toshiba was one of the most popular choices among buyers in '93. It's still a solid choice, with a proven track record for reliability.

if you're thinking of using the drive with more than one PC (e.g., a desktop and a notebook); you can attach an external SCSI interface to the parallel port (or PCM/CIA slot) — something you can't do with a proprietary interface.

It should be noted that the suggested list prices shown are for the drive itself — the interface kit is an additional purchase. All of the SCSI drives listed are available with interface kits for ISA-EISA based PCs, Macs, and MicroChannel machines; the proprietary drives are installable only on ISA-EISA PCs or (with the required interface

The Form Factor

Internal, external, or portable — what's the right one for you? Here are some points worth considering here, too.

Internal drives are similar in form and mounting to floppy, hard, or tape drives — once installed, they become a permanent part of the PC they're installed in. Of course, they can be re-installed if you upgrade to a new system, but they're generally intended to have stable environments to nestle in, and they rely on the host PC to supply the required operating voltage.

External drives come housed in a cabinet with their own power supplies, which makes them both easy to position optimally while working, and to move from one computer to another (even across platforms such as IBM/Mac). External models provide connectors at the rear for attaching the required interface cables and usually also provide RCA-type jacks for audio output. Since the power supply, casing, and other features cost more to produce, it's no surprise that

THINK CACHE!

If you're down in the dumps about the lackluster performance of your old single-speed drive, or even if you want to squeeze better performance from your double-speed, consider a good CD-ROM caching product. *[Ed. note: See "Speedy CDs: 4 Caches for Your CD-ROM Drive," a feature article for PC users in our Fall 1993 issue. Mac users should check out the* CD AllCache 2.0 *review in the Applications section of our reviews this issue.]*

Caches copy frequently used data from the CD-ROM into your computer's RAM. When a program requests data from the CD-ROM that's already been delivered (which happens often with many multimedia titles), that data is retrieved in a virtual instant from RAM rather than going back to the CD. Caches are particularly effective in reducing video pauses.

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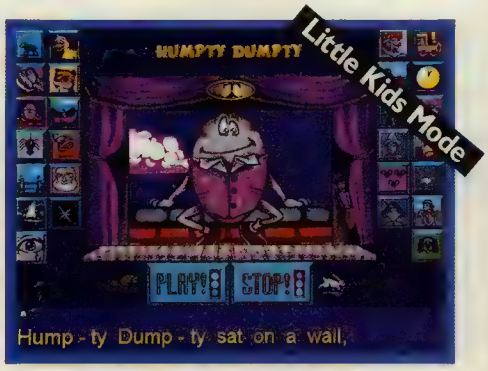

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CDRTW

these drives are more expensive than internal units.

Portable drives offer the most flexibility and convenience in having CD-ROM-to-go capabilities. The two models listed in the chart can also be battery powered. And since both of these drives use SCSI interfaces, they can also be used with PCs or Macs with equal ease.

Pricing

As noted earlier, all prices listed in the comparison chart are manufacturer's SRPs, without interface kits. As with every other computer peripheral, street prices' will be significantly lower, so be sure to shop around to get the best deal once you've decided on the drive you want. You'll also see many of these drives offered in very attractively priced "bundles," which include the interface card and often have a sound board and some CD-ROM software included. Remember that such a bundle is only a bargain if you need this extra stuff, though.

Tom Benford is the founder and president of Computer Product Testing Services Inc., an independent testing and evaluations lab based in Manasquan, NJ. He is also the author of Welcome To...CD-ROM *(MIS:Press, 1993) and* Welcome to...PC Sound, Music, and MIDI *(MIS:Press, 1993).*

Gentlemen, Start Your Drives

If a double-speed drive just isn't fast enough for you, consider these three new models from NEC:

The NEC MultiSpin 3Xe is an external drive that features a switch-selectable SCSI 1/SCSI 2 interface, uses caddy loading, and can play audio CDs without being attached to a PC since it has a full complement of audio transport controls located on its front panel. The drive rotates the disc at triple-speed and is ideal for multimedia use on multiple platforms; suggested list price is $600.

The NEC MultiSpin 3Xi is the internal version of the 3Xe and has all of the same features, except that it relies on the host PC for power (it mounts in a standard 5.25-inch drive bay); list price is $500.

NEC's MultiSpin 3Xp is the personal portable model that can be powered either by its AC powerpack or directly from a rechargeable NiCad pack which enables you to take your data – and music – on the road with you. As with the other 3X models, the 3Xp can play audio CDs directly, and features audio transport controls along with a headphone jack. Suggested list is $455.

If you want to combine lightning-fast speed with the convenience of having six discs available for immediate access at all times, you'd do well to consider the Pioneer DRM-604X. This remarkable drive offers four times the normal rotational speed and has a sustained data-transfer rate in excess of 600KB/second. A 128KB buffer keeps the 1's and 0's flowing smoothly, and SCSI 2 is supported. Suggested list for this screamer is $1,495.

If you still want quad-speed delivery but need more than six discs ready for use at a time, check out Pioneer's DRM-1804X. This incredible device, described as a "minichanger jukebox system," holds three six-disc magazines at a time, making 18 CD-ROM discs (a total capacity of 12GB) available for instant use at all times. The drive uses Pioneer's Quadraspin technology, delivering a 614KB/second data-transfer rate with a 300ms access time. List price is $2,495.

For those with truly gargantuan data needs,

Hitachi's new 200-disc changer will daisy chain with up to three more changers. Result: 800 CD-ROMs on-line.

Pinnacle Micro's 100-Platter CD-ROM Jukebox offers up to 65GB of on-line data storage available. Dubbed the Cascade CD-100, the jukebox is a double-speed drive that offers the lowest cost-per-megabyte of any of the mass-CD-ROM-based storage/serving devices currently available. With a suggested retail price of $9,995, it could be the perfect stocking stuffer for the rich and famous.

Hitachi also announced a multidisc changer with a whopping 200-disc capacity and SCSI interface that allows daisy-chaining up to four changers for 800 discs on-line. As of press time, no price was announced.

Source Material

- Apple Computer
  20525 Mariani Ave.
  Cupertino, CA 95014
  408-996-1010
- Chinon America
  615 Hawaii Ave.
  Torrance, CA 90503
  800-441-0222
- Hitachi Home Electronics
  Multimedia Systems Division
  401 W. Artesia B1
  Compton, CA 90220
  800-369-0422
- Media Vision
  47300 Bayside Pkwy.
  Fremont, CA 94538
  510-770-8600
- Mitsumi Electronics
  4655 Old Ironsides Dr.
  Ste. 130
  Santa Clara, CA 95054
  408-970-0700
- NEC Technologies
  1255 Michael Dr.
  Wood Dale, IL 60191
  708-860-9500
- Pinnacle Micro
  19 Technology
  Irvine, CA 92718
  800-553-7070
- Pioneer New Media Technologies
  2265 E. 220th St.
  Long Beach, CA 90810
  310-952-2111
- Plextor
  4255 Burton Dr.
  Santa Clara, CA 95054
  408-980-1838
- Procom Technology
  2181 Dupont Dr.
  Irvine, CA 92715
  800-800-8600
- Sony Computer Peripheral Products
  3300 Zanker Rd.
  San Jose, CA 95134
  800-352-7669
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  Disk Products Division
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  Irvine, CA 92718
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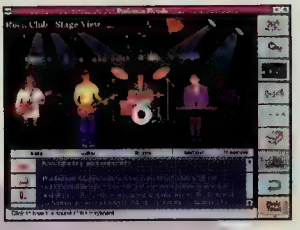
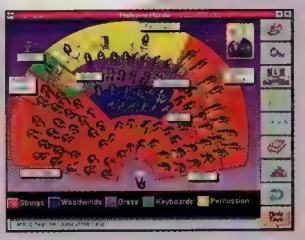


Check out the Rock scene—learn about pop arrangements, or a guitar solo!



The bird's eye view of the orchestra pit —sample any instrument!

Also available: Allie's Playhouse and Composer Quest

PC Multimedia PC

The Musical World of Professor Piccolo

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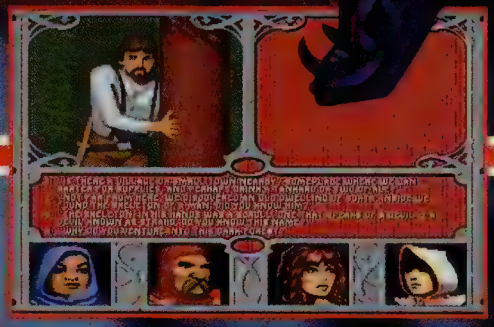

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Product Information Number 188

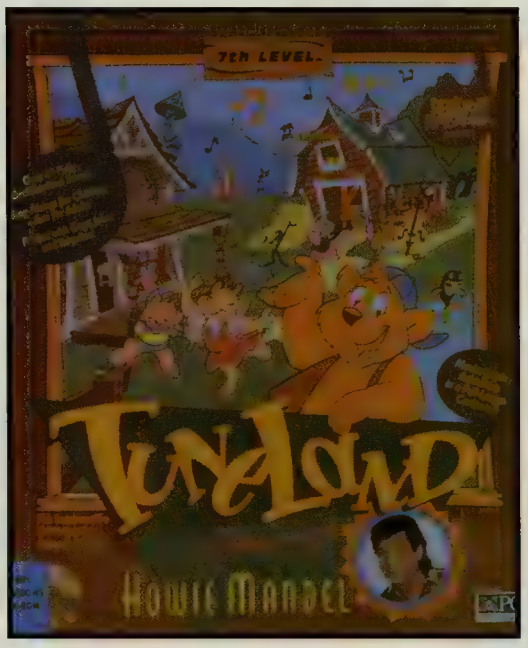
7th LEVEL

New Kid on the Block

Hollywood Goes Silicon Valley

Anne Gregor

Cooking chili for charity at COMDEX, America's largest computer show, is perhaps an unlikely start in the world of CD-ROM, but rock 'n' roller Scott Page is an unconventional soul. Two years ago, Page, a saxophonist with waist-length hair, found himself stirring chili next to George Grayson, co-founder and then-president of the PC software company, Micrografx. Soon the two were talking. A tour of Comdex floor exhibits struck a resounding chord with the musician. "I saw my future," Page says of multimedia. Since then, the quest for zesty programs has overtaken charity chili. Last year, with music producer Bob Ezrin providing the Hollywood link, Messrs. Page and Grayson formed 7th Level, named for a number with myriad mystical associations. The company's first multimedia title, *Tuneland*, starring Howie Mandel, arrived on store shelves last month.



Even in a business rife with varied backgrounds and interests, 7th Level's cooks are an eclectic set. Page is best known as a tenor saxophonist, having recorded and performed with rock groups Supertramp and Pink Floyd. Ezrin produced albums and live performances for Pink Floyd, Peter Gabriel, and Kiss. And Grayson created PC drawing and graphics software. For spice, add the financial backing of one-time junk-bond king Michael Milken and Hollywood powerhouse Merv Adelson, co-founder of Lorimar Telepictures, and it's clear that people will pay attention to 7th Level.

It's an odd journey to 7th Level's offices in Los Angeles, in an older industrial park built across a rail line on abandoned airport land in the suburb of Glendale. Here, not far from the home of Disney animation, Page and Ezrin, with their marketing and idea folks, are plotting the jump from traditional Hollywood to a world of multimedia. Their strategy for this new market — amuse, not teach.

Page and partners don't pretend to educate in the narrow sense. "Most of the stuff we saw was dry," he says of the many programs they screened as they edged into the business. Coming from the entertainment world, he and Ezrin felt that many developers were missing even traditional tricks of tale-telling and fun. "The market was wide open to people who could tell a story," he says. An exception for the trio was

A Trip Through Tuneland

7th LEVEL's debut title is the most elaborate yet of a rich group of children's exploration programs that includes such fine works as *Just Grandma and Me*, *The Tortoise and the Hare*, and *BusyTown*. But Tuneland is more motion-filled and interactive.

Unlike other book-based titles, *Tuneland* was created for the computer, a seemingly subtle but important difference that we'll likely see more of in the future.

Actor Howie Mandel plays comic host, Lil Howie. Big Howie is present in voice only. But Lil' Howie is always there, as guide and playmate in a continuous game of hide and seek that links the critters and scenes in a musical land.

Moving around *Tuneland* is easy. Simply point and click at any of the large variety of hotspots, or choose a creature to guide you to the next destination. A farmhouse, barn, train station, mountain, valley, pond, woods, and barnyard all rock to dozens of songs

Broderbund's *Just Grandma and Me*, which struck an inspirational chord. "It was the first title that had any vibe. It was warm," he says.

Page had lots of objections to early titles. Animated characters created by mathematical algorithms seemed jerky. Music sounded thin and tinny. There was too much stopping and starting as the computer searched the CD-ROM for the next screen. One by one, 7th Level found ways around many of CD-ROM's irksome problems.

Is it Howie or Lil' Howie?

The Old Soft Cel

Tuneland is a mix of old-fashioned movie-making and the new digital world. Harking back to traditional cartooning, it's the product of 12,000 cels, or individual pictures, used to construct the animation. The cels, partly hand-painted by technicians in Korea, have been digitized, then inked and further painted with a software system specially designed by 7th Level.

Greyson and Page with the fruits of their labor.

Tuneland's music is lavishly orchestrated and recorded. "We tried to make it sound like what you'd hear in a movie," says Page. And then there are tricks, such as animated characters romping across a black screen to replace the time needed during new scenerio loads. "The stopping and starting has always bothered me," says Page. The company also created a software engine that allows more elaborate animations to run in Windows.

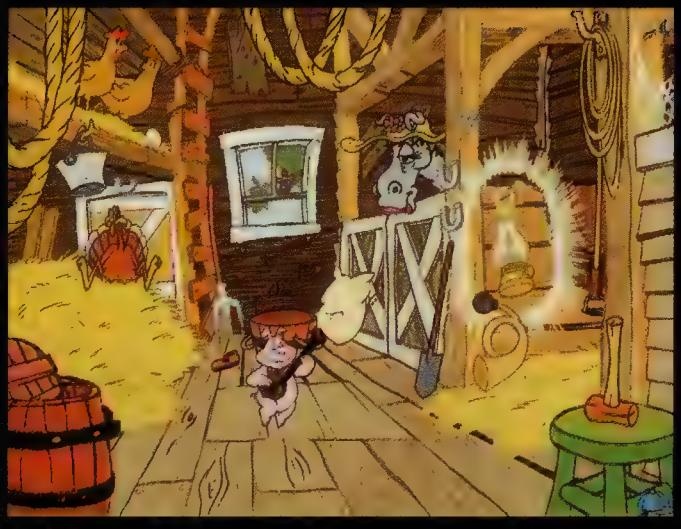
With waist-length hair and casual clothes, Page looks barely older than his intended audience. "I am the biggest child of all," he says as he romps through *Tuneland*, excitedly pointing out his favorite sections and revealing its secrets.

While *Tuneland* is for parents and children (ages 3-6), Page plans something madder and perhaps more adult-oriented for the next round: 7th Level's next title will be a Monty Python side-splitter

There's scarcely a pixel on the screen that doesn't move — and clicking again on the same spot can produce different results.

trilled by the cartoon characters. If you wish, you can sit back, like watching a cartoon, and take in everything happening. A built-in delay mechanism for the mouse helps compensate for young children's ceaseless clicking. It's a nice added touch.

There's scarcely a pixel on the screen that doesn't move. Animals dance to the music. Facial expressions change. Characters grunt, smile, or peer from around



building corners, as other creatures sing, swim, or leap out of trees. And, in a big advance, clicking on the same spot can produce different results. Investigate the wooden chest under the waters of a farm pond, and Lil' Howie emerges — with different wisecracks. Find him under a tree root, click again, and he's no longer there.

Great care was taken with the soundtrack. The songs, a mix of folk tunes and nursery rhymes set to music, are fully orchestrated and sung in classical, rock, and country styles. A

("comedy to the max," says Page) to celebrate the 25th anniversary of the British comedy team. The company is also negotiating to license other characters — no names mentioned — for interactive titles, with up to three new programs by the end of the year.

As he bridges the worlds of Hollywood and silicon, Page finds tremendous differences. The extravagances of the music biz are missing. And the day-to-day disciplines of software design and programming have been tough to get used to.

But, as Page now sees it, technical insight holds the key. While the entertainment industry's attitude toward programmers elicits a Rodney Dangerfieldism — I can't get "no respect" — Page disagrees. "Most of Hollywood thinks of programmers as editors. *We* think of them as stars," he says.

No shrinking violets when it comes to marketing — a strength of Hollywood — the team picked Howie Mandel to headline *Tuneland*. Mandel's Q rating, TV jargon for recognition level, is high. He straddles the child and adult markets with his dramatic work on the now-defunct TV series, "St. Elsewhere," and his own cartoon show, "Bobby's World," on Fox TV Saturday mornings.

But having Mandel wasn't enough. 7th Level courted the unfriendly (at first) curiosity of Bill Gates' team by including a "Yo, Bill" reference in one of *Tuneland*'s screens. According to Page, Microsoft sent a delegation to inspect, found it amusing, and encouraged Gates to take *Tuneland* along to presentations.

By next year, 7th Level plans to be knee-deep in additional educational titles (*Tuneland* being the first in a series titled Desktop Playground) to mesh with Michael Milken's long-term plans for interactive television channels devoted to children. 7th Level also plans to license its tools to half a dozen other Hollywood companies. "We're going to try to dominate the niche of interactive cartoons," says Page.

Veteran music producer and 7th Level founding member, Bob Ezrin.

Inspired by the platinum and gold records lining an upstairs bathroom at its headquarters, 7th Level wants to be at the head of the pyramid when platinum CD-ROMs are given out.

Anne Gregor is an economist, mother, and borderline nerdette. Based in Los Angeles, Anne has written for a wide range of U.S. and Canadian publications.

Contact Info

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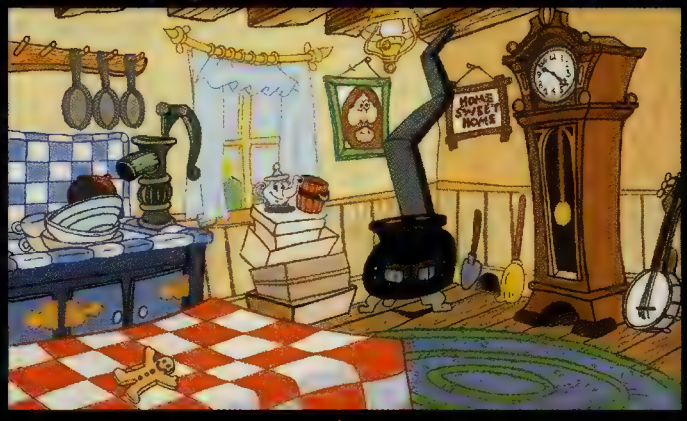
Phone: (818) 547-1955

Tuneland takes personal-computer animation to another level of sophistication — the result is on par with the better cartoons on TV.

range of sound effects are used throughout, as well. *Tuneland* also comes with a faux music CD player loaded with the program's tunes for separate play. My only complaint about the soundtrack is that by making the voices so cute, their clever words are sometimes difficult to understand.

Tuneland takes personal-computer animation to another level of sophistication. Action is remarkably



smooth, and the color palette rich, thanks in part to some sophisticated anti-aliasing techniques used to smoothe jagged lines. The result is on par with the better cartoons on television.

Nor have the makers forgotten to make us laugh. A picture hanging on the farmhouse wall is transformed into a television screen. Lil' Howie turns cartwheels across the screen while he teases the player about not finding his next hiding place. A duck delivers an invitation in perfect "valleyspeak." My daughter giggled as a *Tuneland* blimp sputtered across the sky. There's an abundance of humor and an affluence of delights. I strongly suspect that your youngster won't want to play this one just once.

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SST Earned Its Wings

"Unlike many other multimedia presentation products for Windows, Ask Me Multimedia Center's $149 SST has clearly been designed for the nonexpert who wants to create interesting presentations but won't take the time to suffer through the process..."
– PC Magazine, November, 1993

"... SST is amazingly intuitive and easy to use. SST is perfectly suited for the small business and home office market."
– Computer Monthly Direct, October, 1993

"[SST] is designed to be so easy to use that [the company] is offering a full refund if you can't create a presentation within one hour of installing it. Now that's confidence, or stupidity, or something - but as it turns out it is very simple to use."
– Computer Monthly Direct, October, 1993

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The Multimedia Tutor: Interactive Training Comes Home

So you think you're a good communicator? Says who? Wilson Learning puts you to the interactive test.

Selby Bateman

The scenarios are distressingly common:

A friend comes to you, complaining about problems with a mutual acquaintance. He's tried everything to get along, but nothing seems to work.

A junior employee with great potential is promoted to a management position only to find a range of problems and challenges for which she has little background and few proven techniques.

A recent college graduate accepts a sales position with a small, but growing firm. There's no training, and it's sink or swim.

Whatever the scenario, millions of people are regularly confronted with interpersonal situations they're ill prepared to handle. Frequently they occur in the work place, and sometimes in day-to-day personal life. Where do you find the answers? To whom do you turn?

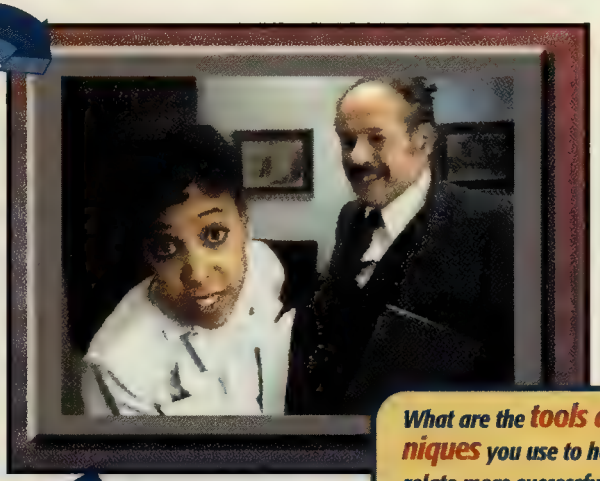
Bookstore shelves groan under the weight of self-help and communication books. And there are many excellent ones. But books are, by nature, static and impersonal — while the challenges are dynamic, ever changing, and very personal.

A few people are lucky to be employed by large companies that use extensive training programs and value on-site educational efforts. But for most of us — we're on our own.

Until now.

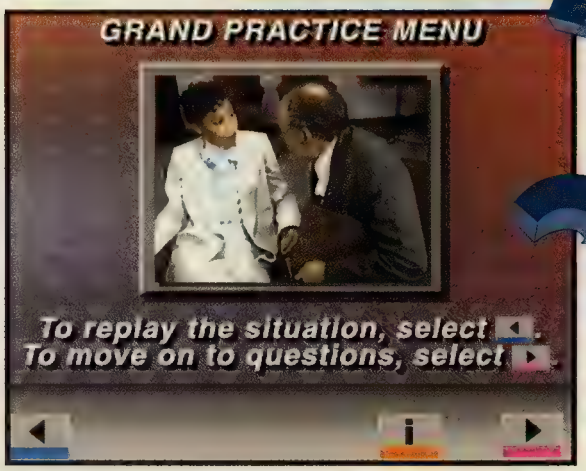
As with so many things, multimedia computing is beginning to open new interactive doors that have previously not existed. And that is now becoming true in the area of personal and professional development.

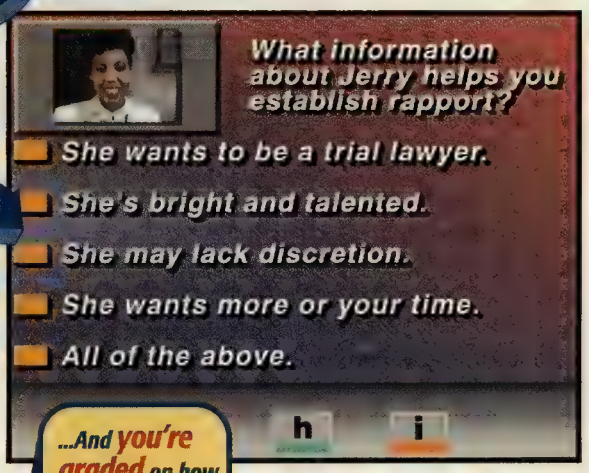
Wilson Learning Corp. of Eden Prairie, Minnesota, is just now introducing the first true multimedia products aimed at consumers who want to improve their



What are the **tools and techniques** you use to help these two relate more successfully?

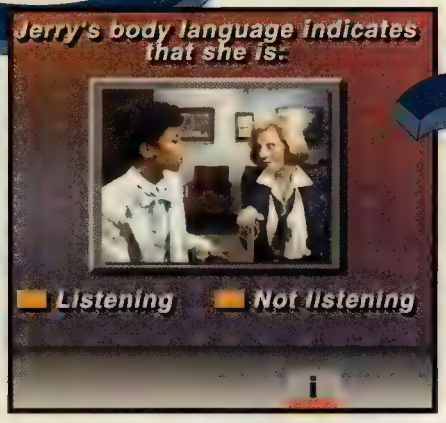
You're center stage in an interactive video that challenges your problem-solving communication skills.

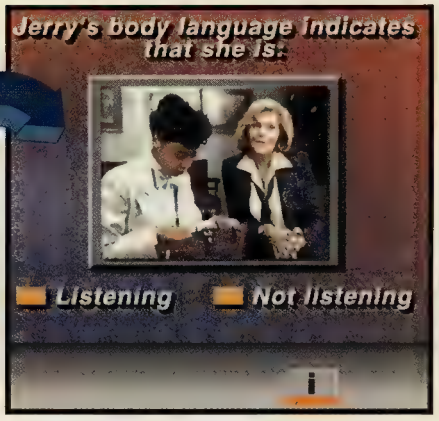




...And **you're graded** on how well you answer these questions.

At various points in the video **you'll be tested** to determine whether you've learned the program's earlier lessons....





So far, so good. But there are **more trials ahead.**

Body language, tone of voice, word choices – the scenarios take you through a variety of situations.

personal and/or professional skills and communication techniques. With four products just out, the company plans to issue ten more interactive titles over the next 18 months, in cooperation with Sony Electronic Publishing.

Based on almost 30 years of developing and implementing corporate training programs, the last ten years of which have included interactive video discs, Wilson Learning is premiering four new CD-ROMs — for both PC and Mac — designed to put interactive training in the hands of the people.

"Studies show that computer-based multimedia training programs enhance learning by as much as 35 percent," says David Ehlen, Wilson's chief executive officer. "And because these CD-ROM programs are inexpensive, they're more readily accessible to individuals and small businesses, in addition to large corporations."

The first two titles out are *Connect for Success*, which focuses on increasing the user's ability to influence others; and *Relate with Ease*, designed to help you build and then keep interpersonal relationships. Following closely on their heels are *Sell to Needs*, aimed at helping sales people become problem solvers for their customers; and *Decide for Sure*, to help improve your decision-making skills.

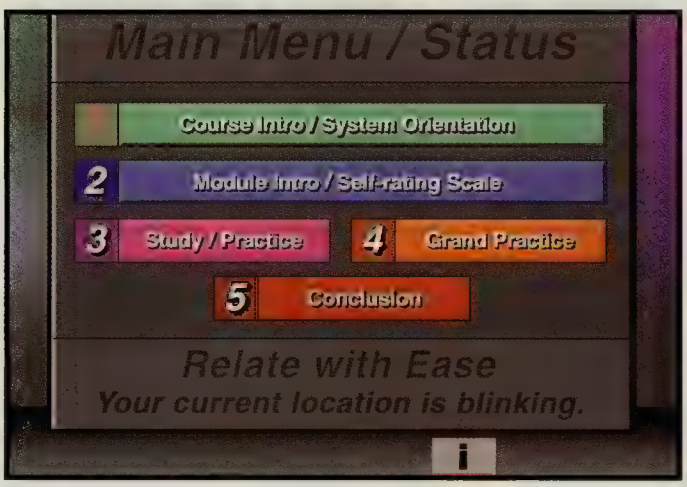
Using its own video production studio, which the company has used for years in its Fortune 1000 interactive video disc (IVD) program, Wilson moved two years ago into the CD-ROM arena — not realizing how explosive things would be.

Each title features extensive video footage, used in role-playing scenarios that place the user in decision-making positions. Individual techniques and tools are presented and then shown interactively, followed by a "grand-mastery" simulation that puts all of the components together in an interactive test to see how well you've picked up the concepts.

Does it work?

Let's take *Relate with Ease*. The basic idea is to teach how to improve five skills that help build lasting relationships. For example, how do you build rapport with another person? Well, one way is to show that you have a genuine interest in his or her point of view. How can you better display the sensitivity that you genuinely want to bring to a situation, but aren't sure about? *Relate with Ease* focuses on showing how to read unspoken messages and body language. The same approach is taken with listening to others, eliciting ideas, and providing feedback.

What is different from reading about these concepts in a book or article is that you're listening to the nuances of another's voice, you're seeing the sometimes fleeting facial expressions. In short, the interactive videos bring a one-to-one dimension that's more personal than a book or a non-interactive video. You know right away whether you're making progress or digging yourself a hole.



From the Main Menu, use each learning module sequentially or review only those on which you need practice.

The grand mastery simulation in *Relate with Ease* is an extended meeting that includes a very promising young attorney who also happens to be a bit on the abrasive side; and the senior attorney who is exasperated with the whole situation. You're the one who has to smooth out the rough spots and find ways to make things work.

First off: "What information helps you establish rapport?"

- She wants to be a trial lawyer.
- She's bright and talented.
- She may lack discretion.
- She wants more of your time.
- All of the above.

As the video goes forward, you're tested periodically by being asked to make decisions such as those above. If things go your way, everybody's happy. If not, well, back to the practice lessons.

"In our work in technology-assisted learning in the IVD area, the thing that distinguished our products were the real-world situations," says Ehlen. "We also found it important for students to demonstrate mastery, not just play back facts, but really be able to apply the techniques."

Although Wilson Learning is the first to enter the consumer multimedia category with this type of product, there's no question that the field will soon be big. As a new category of CD-ROM consumer products, the potential is huge. The corporate training market is a $48 billion industry — and Wilson Learning believes that the consumer-based training market has an equally tremendous potential.

Info

SRP per title: $69.95
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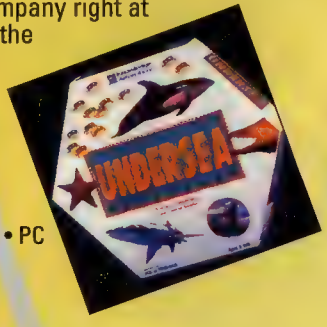

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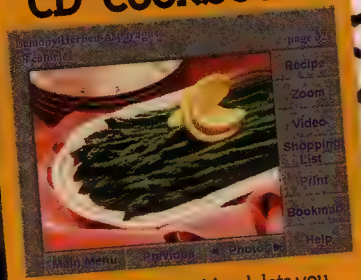
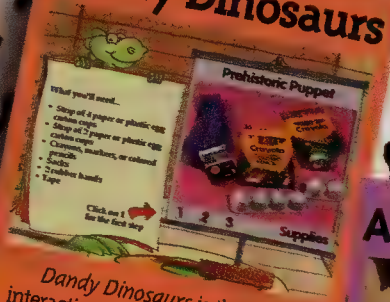


This amazing cookbook lets you explore new cooking techniques with great photos and preparation videos that show how. Print your favorite recipes for friends and family!

Dandy Dinosaurs



Dandy Dinosaurs is the first interactive children's CD-ROM with detailed video explanations of fun craft projects. Max the Dragon builds your child's creativity and confidence through animated stories, inspiring crafts out of everyday materials!

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If you've ever been curious about astrology, this is the CD-ROM for you! Print custom astrological charts, complete with narrated explanations. Compare charts with more than fifty famous people. Learn the history of astrology and amaze your friends!

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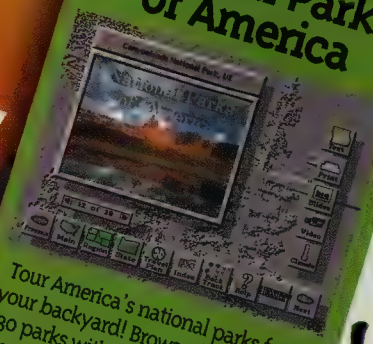

Tour America's national parks from your backyard! Browse through over 230 parks with stunning photos, full-motion video, music and complete park info. Sort by name, location or the criteria of your choosing.

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Every wine lover will drink in this interactive reference—with photos and videos of over 80 wineries, Mondavi on winemaking techniques, on-line advice, glossary, and 1000's of vintages sortable by variety, region, flavor, price and rating!

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Digital Highways

Whether you're planning a trip or traveling vicariously via desktop, there are a variety of CD-ROMs with the right ticket.

ILLUSTRATION BY JERRY DELANOUAY

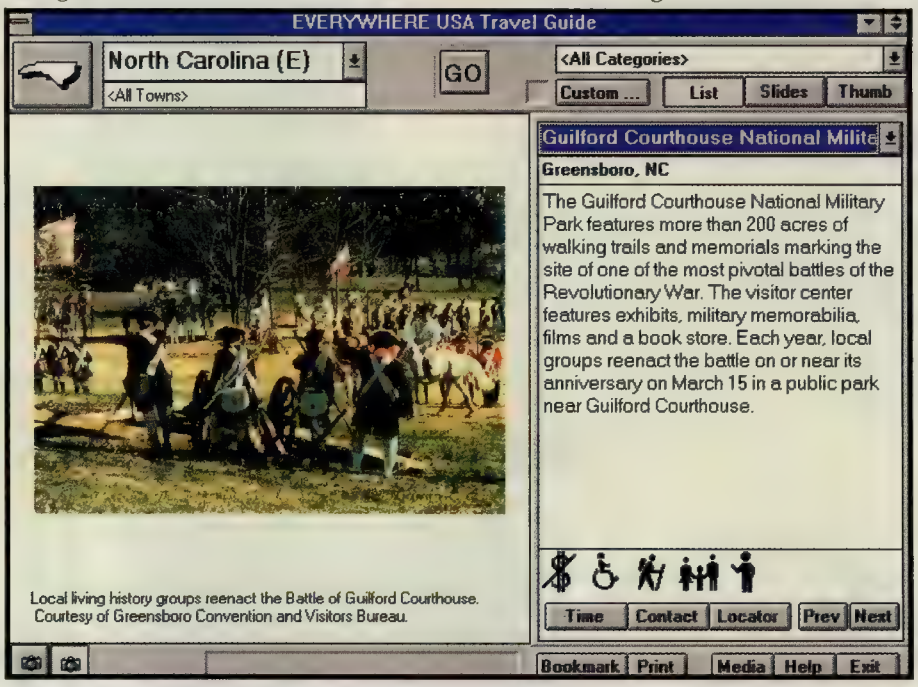
In olden times, when there were still huge areas of unexplored territories, cartographers resorted to filling in their maps with fantastic icons of fire-breathing dragons and horned sea-beasts. But they've long since paved Paradise and put up a parking lot. In fact, there's so much stuff out there and it's all so well mapped, especially by satellites and their computer cohorts on the ground, that data-compression wizards are hard-pressed to cram it all on a CD-ROM (*Street Atlas USA*, one of the discs we'll be looking at, needs all of 630 megs to include every street in the country).

There are any number of geographical aids to assist the business person or student, to help the professional or personal vacation planner, or to simply amuse the armchair traveler. Databases of phone numbers and addresses, street maps, sumptuous visual catalogues of tourist attractions, guide books to hotels and restaurants, and electronically smart route planners are now all available on CD-ROM.

In order to put a selection of recent discs through their paces, and to show us the places we ought to visit along the way, I decided to plan a trip from New York, by way of the nation's capital, to see my friend Phil in Greensboro, North Carolina. I have to take into account the fact that I'll be accompanied by a hypothetical wife who could spend all day in museums and art galleries, 2.73 children who have no interest in culture whatsoever, and an equally hypothetical English sheepdog named Cody, who is interested in anything that smells like food. The kids are very excited about seeing their Uncle Phil. But there's still room in the van, so...hey, why don't you join us?

Lots to See and Do

The starting point for planning a cross-country odyssey like this is Deep River's *Everywhere USA Travel Guide*. Last spring, Deep River published *Adventures* (reviewed in our Fall 1993 issue), a databank that suggested many thrilling vacations around the world. Deep River's new multimedia guide is domestic in



Everywhere USA *contains a photographic infobase to events and attractions throughout the United States.*

Less Than Adventurous

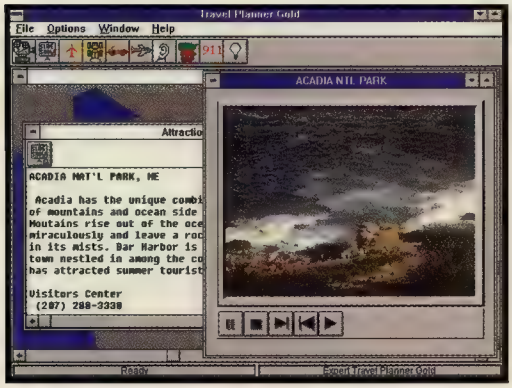
As a way of whetting your youngsters' appetite for an upcoming trip, you could do worse than have them take a tour of *American Adventure* from Knowledge Adventure. Despite the claim implicit in the company name, however, this title is more like a Super Trivia Quiz —– a computerized version of the kind of jumbo games book that's sometimes needed to keep kids entertained while traveling. And ignore that suitability tag of "ages 6 to 106"; 6 to 16 is more like it.

***American Adventure* is a compendium of a time-line almanac, a dozen disparate movie clips, an animated chart of population growth, and a couple of multiple-choice quizzes. The latter are for the most part where, what, and which questions, and offer little in the how or why approach, which might add to the player's store of knowledge and understanding.**

There are two elements of multimedia interest in *American Adventure*. The state-capitals quiz gives clues in regional dialects. And there's a nifty morphing sequence as each president becomes his successor. Still, that's not enough to make this American adventure a really exciting trip; it's certainly not up to the value of some of the other

focus and expanded to a two-disc set.

You can browse by state and then zone in on a smaller region, specify the kinds of attractions and activities that interest you most, scan galleries of thumbnail snapshots, then look at colorful



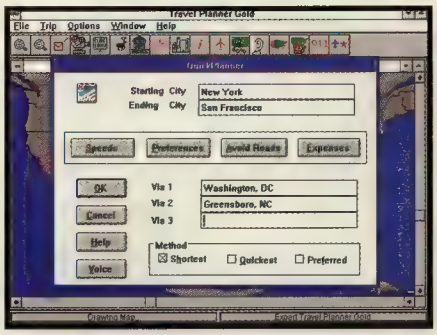
Travel Planner ***can take you on a text and video tour from coast to coast.***

slides or videos of potential areas to visit. Beneath each description is a row of informative icons — if there are hiking trails, for instance, access for the handicapped, or if there are activities for young people, and so on. Further details on times of year, even opening hours, costs, contacts and phone numbers are all just a click away. And if you're not quite sure where any particular place is, you can tap the indicator button and *Travel Guide* will pop up a map that pinpoints the location.

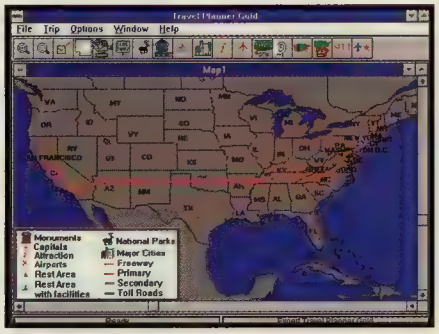
The kids have decided that while in Washington they want to see the National Museum of Natural History — must be something to do with the pictures of the dinosaurs. My wife would like to visit the Washington Doll's House and Toy Museum (note: it's not open on Mondays). I'll probably take the dog for a walk along the towpath of the old C & O canal.

Zooming In

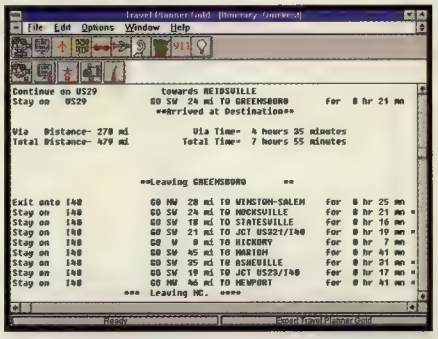
If *USA Travel Guide* is good for suggesting various vacation spots, stopovers, and attractions likely to interest you, then Expert Software's *Travel Planner — Gold Edition for Windows* (which covers the U.S., Canada, and Mexico) assumes at the very least that you know where you're starting from and where you eventually hope to end up. Given the minimum data of those two points, *Travel Planner* will work out the best route for you to take, allowing for the preferences you can indicate in the dialog boxes. Having fed in these few items, such as avoiding primary roads, *Planner* calculates within those parameters and paints a suggested route on its main map. You can then call up a very detailed itinery, view slideshows and video clips of scenery along the way,



First tell* Travel Planner *your preferences...



...then it draws the most suitable route...



...and prints out a point-to-point itinerary.

discs in the Knowledge Adventure line.

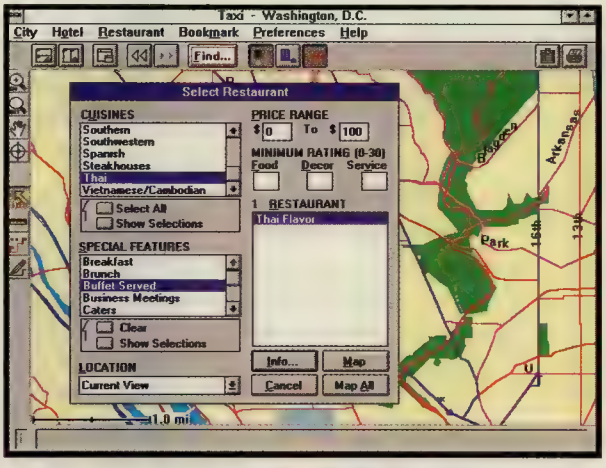
(For DOS or Windows; $79.95; Knowledge Adventure, 4502 Dyer St., La Crescenta, CA 91214 (818) 542-4200

Clever sequence: a succession of US presidents morphing into one another.

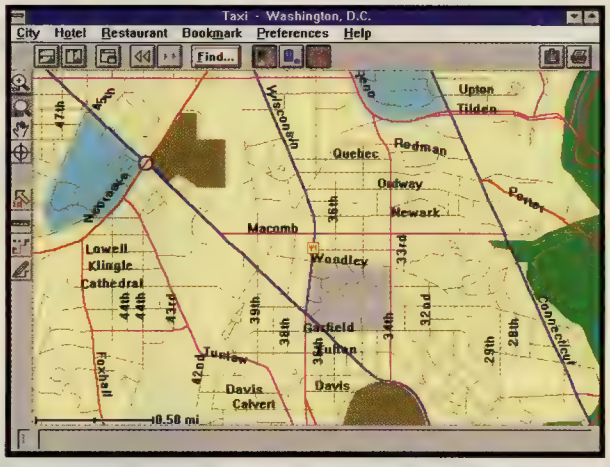
make further adjustments, and print out maps and point-to-point travel instructions.

While *Travel Planner* is packed with interesting features and generates some really helpful output, I found it frustratingly slow as it filled in all the details on its main map between each operation.

For more detailed information on where to stay and which are the best spots for dining, Middlegate's *Taxi* provides detailed guides to five major cities: New York, Chicago, Los Angeles, San Francisco, and Washington D.C. (Discs covering another 18 cities are to follow in the next few months.) The information bank draws on the famous Zagat Surveys, which are based on the experiences of thousands of travelers who have been down this road before you.

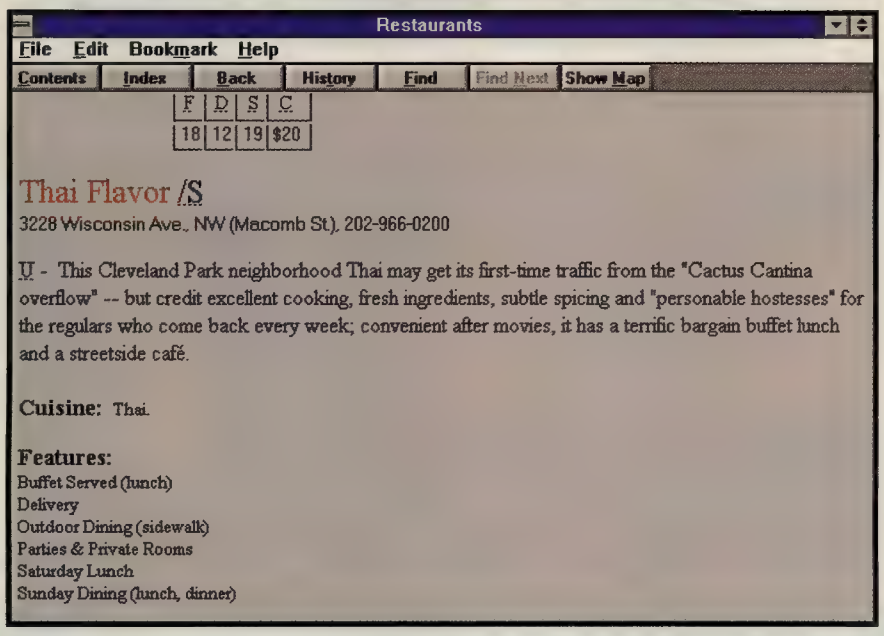


Taxi can help you locate any kind of restaurant...



...pinpoint it on a city map...

...and even provide a detailed evaluation.



Let's continue planning our imaginary journey. Suppose somebody told you about a marvelous buffet at a Thai restaurant in Washington — unfortunately, they couldn't recall the name or location. In *Taxi*, choose Washington, click on "Select Restaurant," and filter by nationality or ethnicity of the cuisine (for this example, Thai). This nets us more than 20 possibilities — you can then refine the search by scrolling down the specialities list, checking off buffet, and that pinpoints the Thai Flavor. Check the detailed write-up: it comes well recommended. So where is it? Push the locator button and *Taxi* draws the appropriate section of the city map, with the restaurant highlighted by a flashing knife-and-fork icon. It's not too far from the Doll's House Museum — using *Taxi*'s "distance between" feature, I could measure it down to the last foot — but they're close enough to plan out that part of our visit to Washington. The same sort of process, using price and features parameters, can be used for finding a suitable hotel.

Planning this imaginary family trip underscores the usefulness of these travel programs if — and only if — you're willing to sit down and work out everything well in advance. After all, you're not going to have a CD-ROM travel guide close at hand when you most need it.

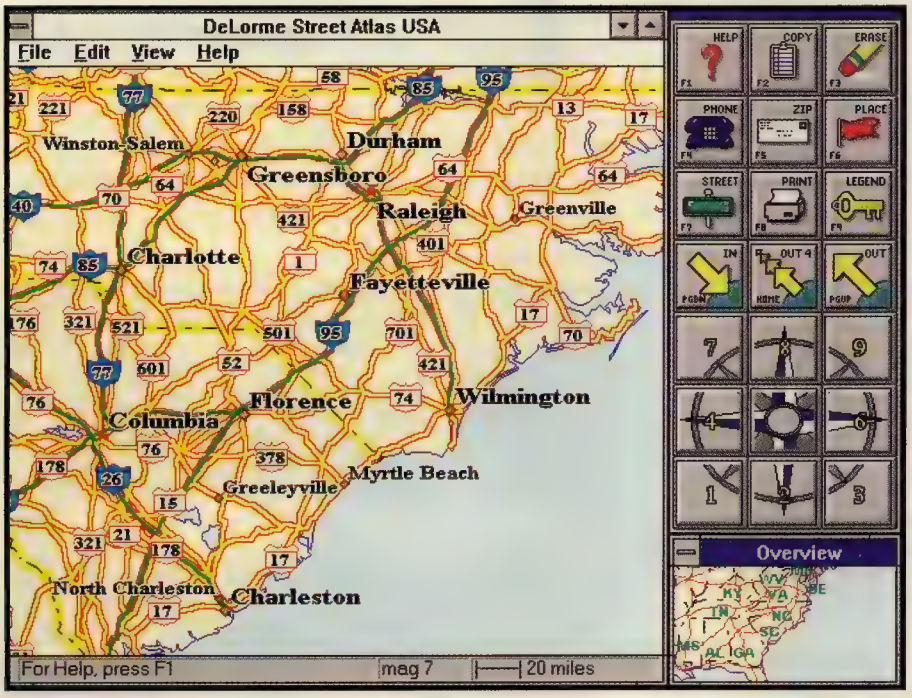
The Street Where You Live

The dichotomy between the familiar sense of handling guide books and atlases in their traditional printed form and coming to terms with their digital representation on CD-ROM is at the greatest stretch when using street-map discs. Why even bother with computerized street maps? Why not just pull out that trusty dog-eared road atlas, or the out-of-date oil

company giveaway that's threathening to fall apart at the folds?

Street Atlas USA: Version 2 for Windows, from DeLorme Mapping, offers several advantages over the paper-based variety — not the least of which is that you don't have to refold it after use. And imagine how many maps and atlases you would need to cover the whole country, which Delorme has managed to do on a single disc. But the biggest plus factor by far is that you don't have to look anything up — no more peering at impossibly tiny type, trying to focus on MacDougal St. rather than MacDonnel St., reading off its coordinates, then finding it somewhere within the square designated H-39 — the progam will do all that for you. Let's say Phil has recently moved to Veasley Street in Greensboro. (I picked Veasley St. because it's a short dead-end street that's difficult to find on the usual road map.) With *Street Atlas*, I only have to zoom in on North Carolina, zoom in again on Greensboro, then type the name I'm looking for in the search box and the program automatically finds it and pops up a map with the street highlighted in blue. This leads to the next obvious advantage of being able to print out custom maps of just the areas you need for any particular journey.

These CD-ROM versions of travelers' aids will not eliminate traditional maps, timetables, paperback guides, and so on — the kind of thing you can stuff in your pocket or pack, to be consulted at a moment's notice — but they do allow a business person to plan a trip more precisely, or let a family explore various vacationing options in advance. They can even be viewed as recreational software for the armchair traveler. But in the best of all worlds, instead of being marginally overlapping and competing products, these complementary programs would be integrated into a single cohesive travel planner and guide that would place the entire U.S.A. at your fingertips.



Street Atlas *can zoom...*

...right onto the street you're searching for.

Sources

Everywhere USA Travel Guide (MPC, $59.95) Deep River, P.O. Box 9715-975, Portland, ME 04104 (207) 871-1684

Taxi (Windows, $79.95) Middlegate, 28 Center St., Clinton, NJ 08809 (800) 505-TAXI

Street Atlas USA (Windows, $169) DeLorme Mapping, Lower Main St., P.O. Box 298, Freeport, ME 04032 (207) 865-1234

Travel Planner Gold Edition for Windows (MPC, $49.95) Expert Software, P.O. Box 144506, Coral Gables, FL 33114 (305) 567-9990

Speaking in Tongues

A multimedia CD-ROM might be the best format yet for learning a new language. Here's a look at some top packages on the market.

Alex Lane

There was a time when learning to speak a foreign language on your own — without benefit of living abroad or ready access to a native speaker —meant buying a set of books and a stack of records. Records eventually gave way to cassette tapes that, in turn, have begun to give way to audio CDs. But the basic approach remains the same: You listen to and repeat phrases to acquire fluency, and read the books to learn spelling and grammar.

In Vocabulary Drill, you can record your speech and receive a grade for your pronunciation.

Learn to Speak Spanish

HyperGlot Software; MPC/Mac; $149.00

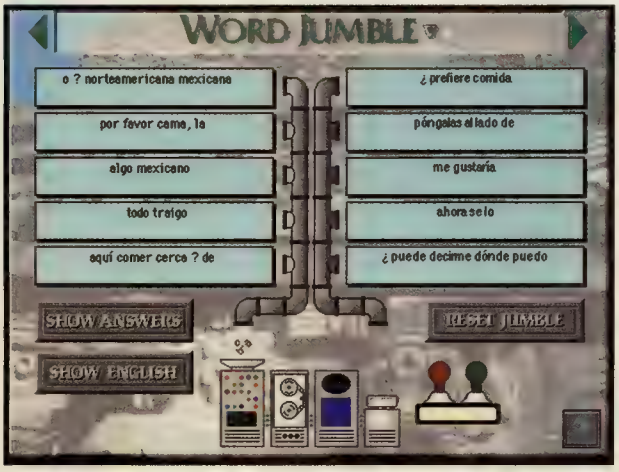
Although the traditional listen-and-repeat phase of language learning is interactive, it's a very rigid kind of interaction. If you miss or have difficulty with a phrase, backing up the record or tape quickly becomes an unwelcome effort; it's easier to proceed to the end of the lesson, then start over. There's also no practical way to hear yourself speak the language — as a result, poor pronunciation habits became ingrained early on.

An interactive multimedia CD-ROM is an ideal solution for learning a language, and a variety of products are now available. We'll look at a selected title from three of the most popular series that undertake instruction in different ways: the Learn to Speak series from HyperGlot Software, the TriplePlay series from Syracuse Language Systems, and

the Video Linguist series from Cubic Media. For comparison purposes, we looked at the Spanish-language versions of these products.

Learn to Speak Spanish is a complete program that's directed at students, business people, and tourists up through the intermediate level of learning. Its 30 lessons cover the kind of everyday situations that a tourist might run across in a Spanish-speaking country.

Each lesson is structured, with separate segments for developing vocabulary as well as listening and communications skills. An ongoing storyline — concerning one Thomas Smith and his trip to Mexico — is the basis for segments whose aim is to help users comprehend spoken Spanish and



Several games are available in* Learn to Speak Spanish *– Word Jumble asks you match phrases.

gain practice speaking longer sentences. If you have a microphone, you can use your computer to record and play back your voice to help master pronunciation. Vocabulary drill and several exercise screens in each lesson further help the user master the material. A 360-page text and workbook supplement the CD-ROM.

The opening screen of each lesson shows a brief video of life in Mexico City, providing a visual cultural background for the lesson. Virtually all the other video used in the lessons, however, consists of talking heads repeating what's written elsewhere on the screen, a feature of dubious merit. You get the feeling you're watching a news telecast.

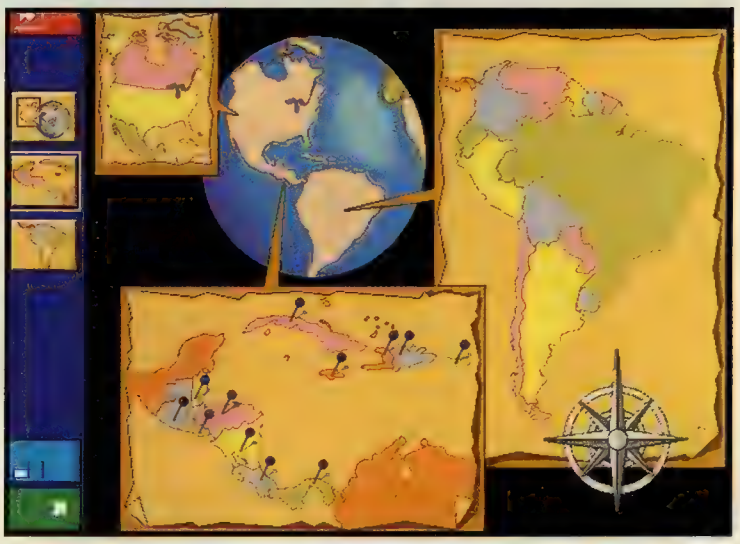
On the plus side, the product provides informative notes on vocabulary and culture, and a wide range of exercises that include games such as "Word Jumble" and "Drag and Match." If you like structured presentation of material and don't mind the traditional, grammar-based approach to learning a foreign language, HyperGlot's Learn to Speak series is a good place to start.

TriplePlay Spanish

Syracuse Language Systems; MPC; $89.95

By contrast, the folks at Syracuse Language Systems maintain that the way a child learns his or her first language — total immersion using sight, sound, and play — is the ideal way to learn new languages. Indeed, *TriplePlay Spanish* is a text-free application: users learn by playing games involving pictures and sound only.

There are no lessons in *TriplePlay Spanish*. Instead, users start by choosing one of six subject areas: food, numbers, home and office, places and transportation, people, and activities. As a subject is selected, various game



Learn world geography in one of* TriplePlay's *Level I games.

icons are highlighted. The games are arranged by level.

Level I games teach nouns, verbs, and simple phrases through a variety of game formats such as "Concentration" and "Bingo." Level II games build on the previous material, teaching other parts of speech and using complete phrases and sentences. Finally, Level III games present realistic dialogues and conversations in a comic-strip format and offer users the opportunity to compare their pronunciation with that of a native speaker.

At first, I found working with *TriplePlay*'s immersion approach to be more stressful than the traditional approach of HyperGlot's product. In one game, called "City Map," where you find city locations by name or by following directions, I initially had to listen to the Spanish several

This Level III game makes use of a comic-strip format to put you in conversational situations.

times to decipher it. After some practice, though, I was able to figure out what was required on the first or second try. This aural approach, by the way, is true-to-life: when you ask questions in a foreign country, you have to be able to understand the spoken answer.

TriplePlay Spanish offers an effective introduction to Spanish, although users will have to turn elsewhere to learn how to read and write the language. The emphasis here is on a less structured, more "fun" way to learn a language.

Video Linguist Spanish

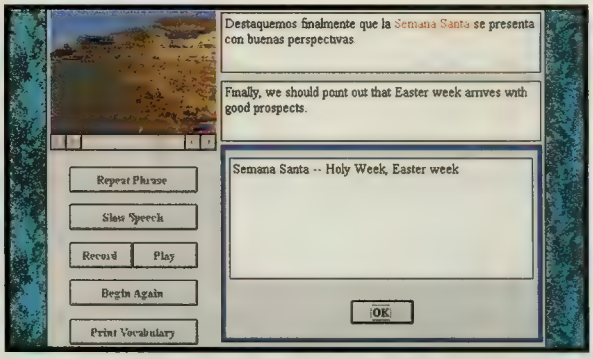
Cubic Media; Windows/Mac; $139.00

This title also takes an immersion approach to teaching Spanish, although the technique used here involves the extensive use of film clips taken from Spanish National Television.

The opening screen of the program presents you with a menu of eight choices (for example, education, sports, travel, and lifestyles.) Clicking on a choice presents either a sub-menu of choices, or a window with a video area and several control buttons. Overall, there are 44 video lessons.

Clicking on the start button of the video displays a narrated video clip. If the narration is too quick for your ear (as it typically was for mine), you can click on either "Repeat Phrase" to hear the material again, or on "Slow Speech" to hear the narration spoken more slowly and clearly. Unfortunately, slowing down the speech also slows down the video to the point of annoyance.

You can optionally display text boxes containing the Spanish and English text of the narration. Clicking on a word in the Spanish text calls up a vocabulary window with a definition of the word (or idiom, if you happen to select one), and you can save and print vocabulary for later reference and study. As with the other two packages discussed so far, you can record your Spanish and then compare it to the native original.



A nice feature in* Video Linguist*: learn vocabulary words simply by clicking on them.

Unlike the HyperGlot product, which wastes too much video time with talking heads, the *Video Linguist* clips more closely correspond to the subject at hand.

Yet here, too, they occasionally fall short. Television editors have a habit of inserting "filler" video to kill time while the narrator makes a point. For example, in one video on education, several students are shown descending a staircase while the narrator talks about ambitious young people striving to earn money. In such places, unless you're following the narration in a text box, it's very easy to get lost.

Whereas *TriplePlay Spanish*'s immersion approach allows you to crawl before you walk, *Video Linguist* sets a running pace at the very start. For that reason, it's not a product I'd want to use to start learning Spanish. On the other hand, it offers a solid way for folks who are already at the intermediate or advanced level to further improve comprehension and sharpen vocabulary.

Many Tongues, Many Approaches

The products covered here typically represent only one of several lines available from these publishers. In addition to its Learn to Speak series, HyperGlot offers an immersive Berlitz Think & Talk course, aimed at

beginners, as well as a series of skill-building programs aimed at pronunciation, vocabulary, tense, and reading. *TriplePlay* publisher Syracuse Language Systems also offers *Introductory Games* and *Goldilocks & the Three Bears*, both aimed at 4-12 year-olds. *Video Linguist* is Cubic Media's first entry in the multimedia language field, with other products in the planning stage.

All three publishers offer their products in languages besides Spanish, and a toll-free call is the best way to find out what's currently available.

Multimedia-based language training represents a quantum improvement over traditional methods of learning a language. Whether you decide to learn the traditional way, with lessons and drills, or via the immersion route, these products can quickly get you up to speed in a foreign language.

Alex Lane is a Colorado-based writer, consultant, and speaker. He has been using CD-ROMs since 1988, and still has his Amdek Laser 1 CD-ROM drive.

Spanish Scholar for Windows

Sometimes, what you need isn't a tool to help you learn a language, but a tool to help you use one. A floppy-disk product, *Spanish Scholar for Windows*, offers fairly comprehensive Spanish and English dictionaries and the means to use them.

In addition to ordinary word lookup in either direction, the program does a thorough job of conjugating verbs and providing synonyms and related words. A translation feature performs sentence-by-sentence translation in both directions, though the translation quality is only fair.

There are other nits to pick about this program. For example, the interface described in the manual is different from that of the actual program, and non-masculine nouns are termed "femenine." In general, though, *Spanish Scholar* sure beats thumbing through a dictionary.

Road Scholar
2603 Augusta, Ste. 1000, Houston, TX 77057 Phone: (800) 243-7623

Information

HyperGlot Software P.O. Box 10746, Knoxville, TN 37939-0746
Phone: (800) 726-5087
Syracuse Language Systems 719 E. Genesee St., Syracuse, NY 13210
Phone: (800) 688-1937
Cubic Media 729 Benjamin Fox Pavilion, Jenkintown, PA 19046
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Grade 4	■	■	■	■	■
Grade 5	■	■	■	■	■
Grade 6	■	■	■	■	■
Grade 7	■	■	■	■	
Grade 8	■	■	■	■	
Pre-Algebra	■				
Algebra 1	■				
Geometry	■				
Algebra 2	■				
Trigonometry	■				

Supplemental Titles (for Macintosh only)

- ■ Storybook Maker™ • K–3 ($169)
- ■ Community Exploration • K–12 ($79)

Language Enrichment • Pre-K–3

- ■ Home, Sweet Home ($69)
- ■ Me, Myself, and I ($69)

Early Learning • Pre-K–2

- ■ Rosie's Lemonade Stand • Math ($49)
- ■ Forgetful Freddy • English ($49)
- ■ Mischievous Marvin • English ($49)

Product Information Number 186

Encyclopedias in Evolution: Rating the Latest

In recent months, The Big Three multimedia encyclopedias have all been dressed in a new set of clothes. How good are the upgrades?

Neil Randall

As books, encyclopedias are both exciting and frustrating. They're exciting because they contain so much information about so many different topics that sheer browsing is more than half the fun. But no matter how big they are, how many words and pictures they offer, they never have quite enough about the things you really want to know. That's what makes them frustrating.

CD-ROM encyclopedias are even more exciting and more frustrating. Instead of just words, illustrations, and pictures, you have sound, music, animation, and video at your fingertips. But just like their older cousins, there isn't quite enough. No matter what you find, you'll wish there were more.

All this was true of the first releases of *Grolier's*, *Compton's*, and Microsoft's *Encarta* encyclopedias. And there were other problems as well. The first *Grolier Multimedia Encyclopedia* wasn't very colorful; the first *Compton's Interactive Encyclopedia* was sparse in several areas; and the first *Encarta*, despite looking great, was too slow for frequent use.

All three are now available in new versions. Are they better and more exciting? The answer is a definite yes. As good as they are, they still don't have enough.

But encyclopedias are among my favorite kinds of books, so it's only natural that these packages are among my favorite CD-ROMs. What they offer is hours and hours of curiosity shopping, endless sessions of dabbling, browsing, and learning things you simply never knew before. If, like me, you were the kind of kid who wore out pages of the trusty old *World Book*, be prepared to spend more time than you can afford searching, reading, listening, and viewing. So much to know, so little time.

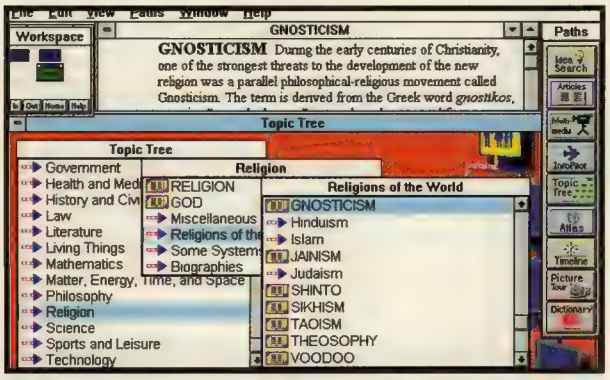
But let's find out what's new with the updated versions.

Compton's Interactive Encyclopedia for Windows

The new *Compton's* (v.2.01) wins on at least one count: overall added value. With the package comes a coupon to

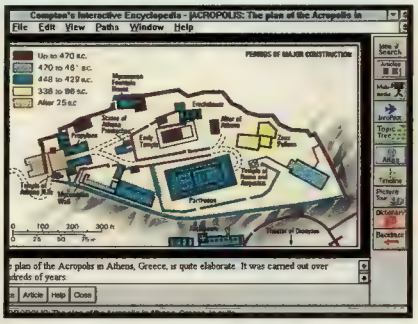
buy the 26-volume book version for a mere $99. The CD-ROM includes all 26 volumes, but sometimes there's no substitute for paging through the slick, glossy pages of a paper version. Besides, it looks great on your bookshelf.

Maybe you never actually wanted to visit the home of the Bills, but Compton's at least helps you understand why it's so cold there.



The Topic Tree and Virtual Workspace in Compton's fit together to provide information at a glance.

Speaking of great-looking, the graphics and videos in *Compton's* have been reprocessed to look more colorful and less grainy than those in the earlier version. Pictures are still accessible from a variety of areas — you can click on the camera icon while reading an article, for example — but a click on the Picture Show icon will clearly demonstrate the improvements. The videos can be played at either normal size (with Video for Windows' usual postage-stamp look), or at full screen (with resulting loss of clarity). Note that *Compton's* now comes in a ReelMagic version. Those running the ReelMagic board (see article last issue) will see the encyclopedia's video in full motion at full screen.



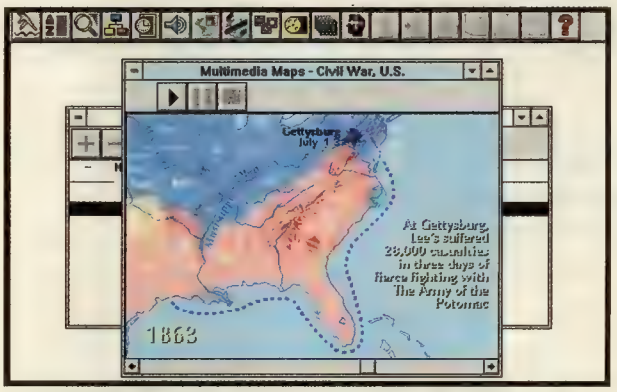
This colorful architectural plan in Compton's offers a look at the construction of the Acropolis.

Also new with the updated encyclopedia are two timelines: one for the U.S. and one for the world. These superb features show at a glance, by use of time bars, the events and historical processes that occurred simultaneously over a given time period. Click on a time bar, and you're taken immediately to the appropriate encyclopedia article. Click on the timeline's Detail button, and you get an extremely attractive visual demo of the resources in the enclyclopedia that point towards that particular time period. From here you can browse for general information or select a particular topic.

Compton's major new feature is called InfoPilot, now the dominant search tool. InfoPilot offers a visual means of displaying the full context of the item you searched for. Five separate windows show related articles, while the background, fully interactive, offers a wide variety of other possibilities. It works, and it works well.

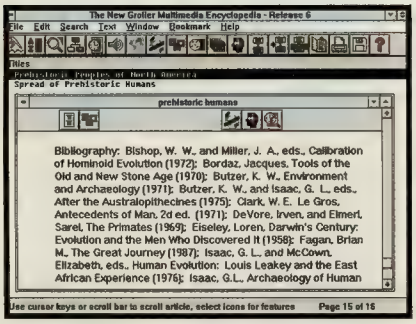
Other improvements abound. The encyclopedia's Topic Tree, used to narrow down topics, looks much better than before. There are more animations and sound bytes than in last year's version, and the non-stop help system keeps you going. Importantly, the program is better integrated with word processors, although more work need to be done in this area. Version 2.01 is clearly a better product than its predecessor — if you use the earlier product, upgrade.

The New Grolier Multimedia Encyclopedia

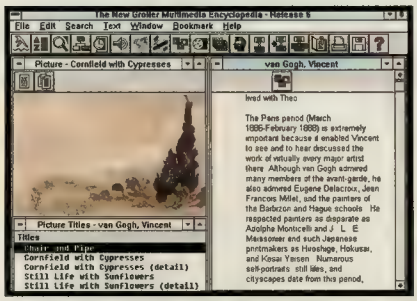


Grolier's Multimedia Maps feature combines multi-colored maps with strong explanations. This one outlines the entire Civil War.

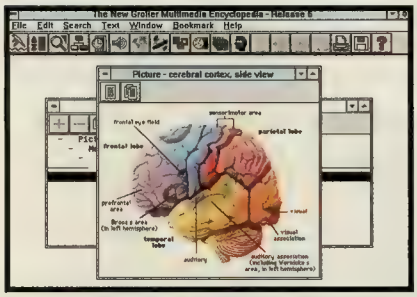
Grolier's incorporates all 21 volumes of *Grolier's Academic America Encyclopedia*, but there's no *Compton's*-like deal to buy the books as well. Instead, Grolier has an upgrade offer that lets you buy the $395 CD-ROM for $149.95 if you own any other significant reference product. Check with



Grolier's *offers a high-quality bibliographic detail. This bibliography points to a wide array of additional readings.*



You can read a detailed essay about Van Gogh in* Grolier's, *and also see examples of his work.



The brain may not be as colorful as this picture suggests, but* Grolier's *uses this type of art for clear explanation.

your dealer.

The 1994 version improves *Grolier's* sparse interface, primarily by giving you a main contents screen that lets you easily move from feature to feature. Clicking on one of the 12 buttons leads you to a similar screen divided among major topics. Once past this submenu, however, you move into the text-based, clickable lists that made earlier *Grolier's* versions comparatively quite ugly. It's still ugly, although it certainly works.

What *Grolier's* sacrifices in interface aesthetics, however, it makes up for in content. New to this version is a sustained multimedia theme. The Knowledge Explorer feature, for instance, offers multimedia essays on a variety of topics. These are narrated presentations incorporating sound and graphics, each lasting about four minutes. Another new feature, Multimedia Maps, is similar. Call up the multimedia map for the U.S. Civil War, for example, and you get a seven-minute narration of the history of the war, supported by animated maps showing everything from state secessions through troop movements.

The problem is that you're left wanting more. In all its multimedia elements, from its videos through its multimedia maps and its Knowledge Explorer explanations, *Grolier's* simply seems sparse. The multimedia maps menu for Ideas and Beliefs, for instance, contains only one item — Women's Suffrage — when surely the spread of Islam or the decline of communism would be every bit as interesting.

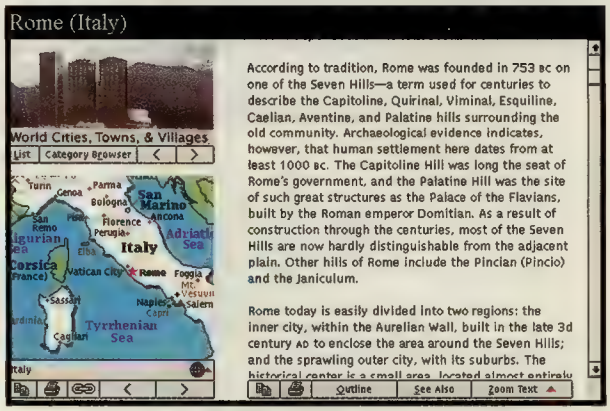
Price Wars

Although each of the encyclopedias carries a $395.00 SRP, you won't pay nearly that much. Street price for *Encarta* is as low as $89.95. And Grolier's and Compton's offer some special deals. For its '94 version, *Grolier's* has a $149.95 price through April 30, and an upgrade price of $79 for owners of earlier *Grolier's* versions. Compton's lets you upgrade from any earlier version for $49, and offers a $149 "upgrade and switch" deal for owners of *Encarta* and *Grolier's*.

Mac owners can purchase Mac versions of *Grolier's* and *Compton's*, although titles do not include the latest upgrade features covered in this article, nor are they as aggressively priced.

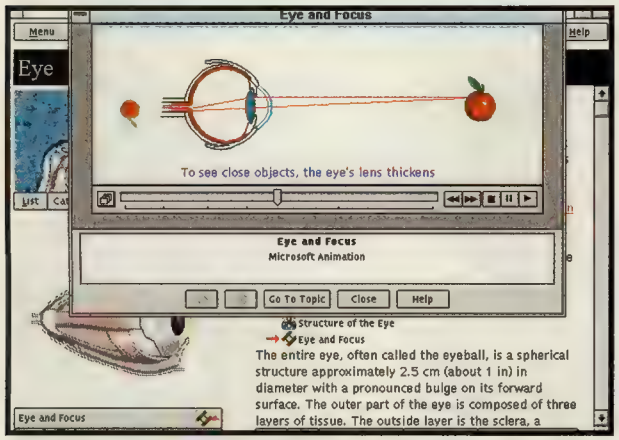
Grolier's great strength remains the quality of its textual material. Written for a somewhat more advanced audience than either *Compton's* or *Encarta*, these essays are more suitable for advanced high-school or even early college research. Especially useful are the lengthy bibliographies at the end of many articles, even though their presentation is far from visually pleasing. *Grolier's* remains weak in its synchronization with word processors, but the information you do get is of consistently strong quality.

Microsoft Encarta Multimedia Encyclopedia 1994

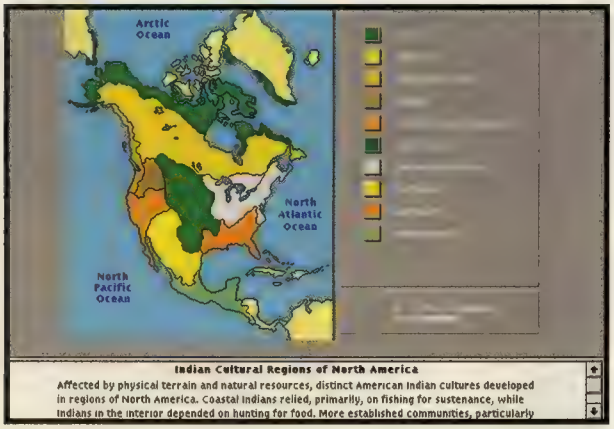


Rome wasn't built in a day, and neither was* Encarta. *This typical screen shows interrelated picture, map, and text.

If sheer attractiveness was what mattered, *Microsoft Encarta 1994* would win the encyclopedia wars hands down. Based on the 29-volume *Funk & Wagnall's Encylopedia*, this is a gorgeous-looking program — not just the well-designed opening screen but practically every screen, no matter how far you dig. The only aesthetic flaw is the fact that, unlike the other two, it doesn't adjust to resolutions above the 640 x 480 VGA standard. Run it at 1024 x 768, for instance, and you have almost unreadably small text.



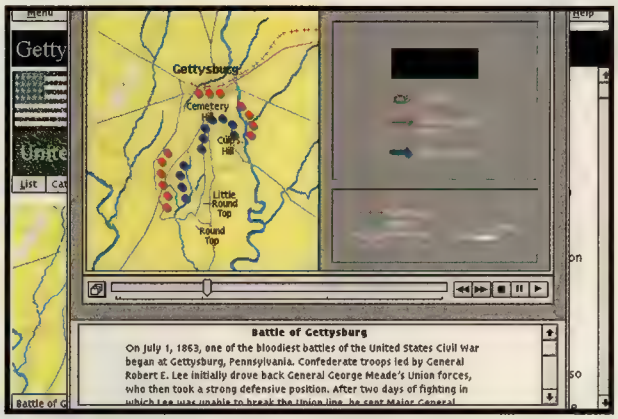
Need to know how the eye focuses on objects it sees?* Encarta *shows and explains.



One of many maps in* Encarta*, this one offers insight into the cultural regions of North America's indigenous peoples.

Everything about *Encarta* shows Microsoft's increasing attention to interface design and usability. Inside the box is a colorful user card showing how to get started navigating the program, and one booklet offers suggestions about doing research papers. Clearly, this is an encyclopedia aimed at upper elementary through high school, with even its narrations geared specifically for this audience. Every feature of *Encarta* is graphically rich: animations on topics such as the rise of Alexander's empire and the progress of the Battle of Gettysburg combine labels, icons, and colored maps.

The 1994 edition offers increased speed, a more usable "wizard" to help you find particular items, and, usefully, a new wizard to guide you through the various galleries (videos, animations, sounds, etc.). There's lots of everything, including a number of new maps, tables, animations, and music clips (there's now a special list for jazz).



Encarta offers a wealth of graphically based explanations. Here the Battle of Gettysburg is explained in colorful detail.

A new "orbit simulator" lets you see what happens if you change the moon's orbit, and presumably will be expanded into other simulators in later editions. The only real shortfall occurs with videos — there just aren't enough to go around.

Encarta continues to offer the best support of the three encylcopedias for incorporating the information into word processors and other programs. At times the whole thing might seem a bit too slick, but it's a walking — uh, spinning — argument for the advantages of multimedia.

So Why Am I Still Frustrated?

Excellent though these products are, I want more. More videos, more animated explanations, more text, more in-depth research capabilities, more artwork, more maps — you name it. But it's still early in the multimedia game. Maybe soon — by the turn of the century, say — I'll have the 25-disc Encyclopedia of All Things I'm looking for. For now, these will do. And quite nicely.

Neil Randall teaches English at the University of Waterloo in Canada. A writer for a variety of computer magazines over the past ten years, he is currently working on a book about the Internet. Email: NRANDALL@hookup.net or on CompuServe at 73637,1773.

Source Info

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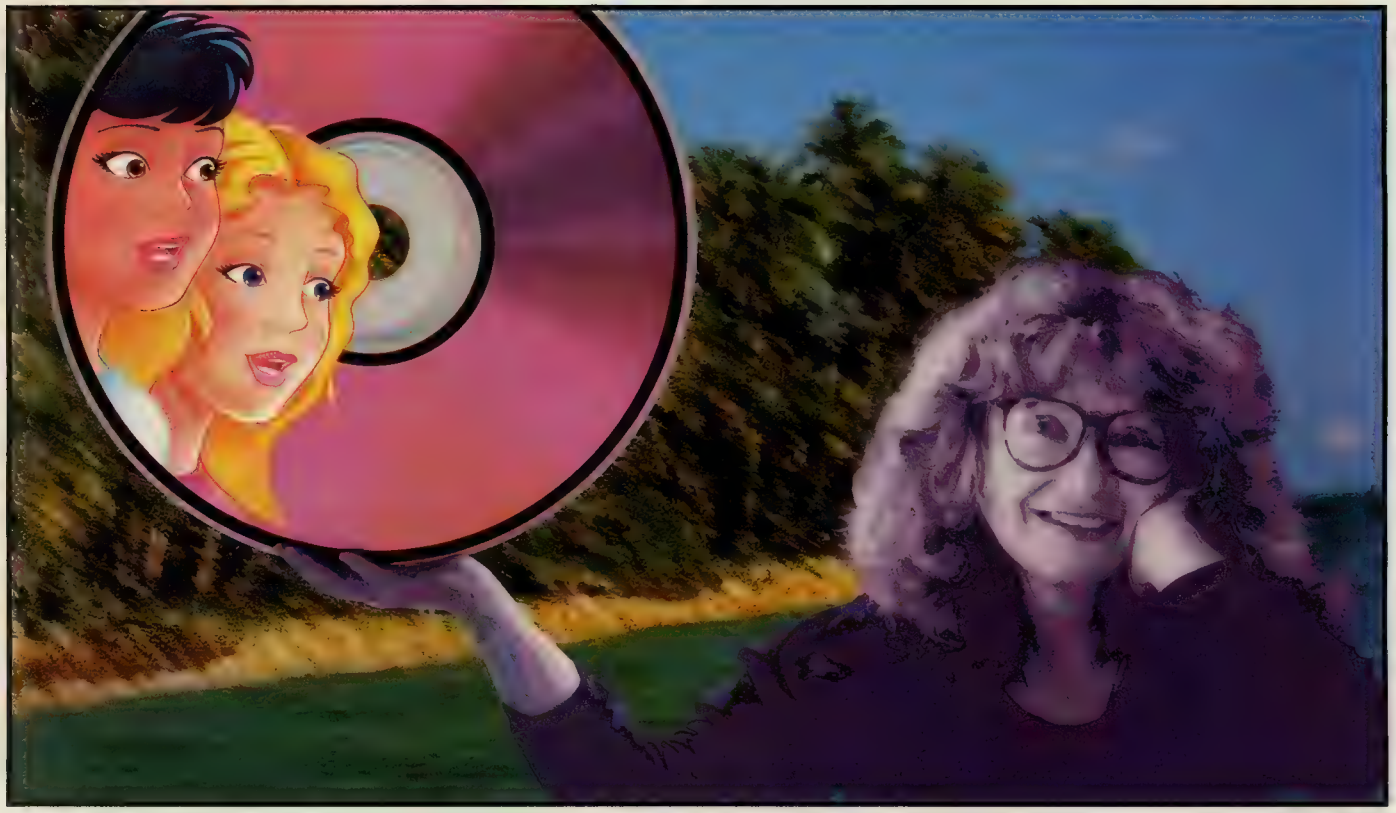
Microsoft Corp. One Microsoft Way, Redmond, WA 98052-6399 (206) 882-8080



Girls Just Wanna Have Fun

Sugar and spice? Not in this industry! Game designer Trina Robbins talks about how the first CD-ROM for girls finally — finally — got published.

Leslie Mizell

"Barbie is nice, and at least it's something for girls," says Trina Robbins. "But I don't own a Barbie, and I'm proud of that fact."

Strong words coming from a writer and illustrator of Barbie comic books. But Robbins is nothing if not candid — about her work, her lack of a computer background, and the treatment of young women by the gaming community.

"There should be something for girls better than the mindless violence in games designed for boys," she says. "It's nice that there are gender-neutral games, but why not design something specifically for girls? They need something that's just for them, that has characters they can relate to. Fourteen-year-olds need healthy role models, not flashy actresses or models. When I wrote my own story, I put in normal teen-aged girls who *aren't* perfect."

Her own story is *Hawaii High: The Mystery of the Tiki*, a CD-ROM game published by Sanctuary Woods, and designed for girls eight and older. A cross between episodes of "Gidget" and "Scooby-Do," its comic-book roots are obvious.

"I attempted to sell it three different times to comic-book companies," Robbins says, "but it was rejected for the same reason — they loved the concept, but they weren't doing comics for girls. 'How could we sell something so gentle?' I was asked, and that's a direct quote.

"Then a friend who worked for Sanctuary Woods suggested I pitch it there. I wasn't familiar with anything about CD-ROMs, and I had no idea what a CD-ROM company wanted in terms of a concept, so I just sent them the comic proposal. But they loved it."

Kristy Sager, director of public relations for Sanctuary Woods, agrees with Robbins. "Girls are pretty much neglected by the gaming world," she says, "and Trina came to us with an interesting

project. We thought it was time to offer alternative fare and broaden the market."

Beach Party

Hawaii High: The Mystery of the Tiki is the first of a projected series starring two 14-year-old girls. Jennifer hails from New York City; Maleah is a native Hawaiian. Jennifer arrives at Hawaii High the same day a tiki disappears from a sacred ruin. Soon the two are searching for the idol, running from crooks, and encountering puzzles at every turn.

"The model I had was one of those 'write-your-own-adventure' books," Robbins says, "where players select the paths in which the story goes. But in meeting with Sanctuary Woods, we explored the interactive things we could do. We came up with great animation, ways in which the viewer can interact with the story, ways to get from one screen to the next. I was like...wow!, look at what can be done with CD-ROM! You can have a story that's not only non-linear, but interactive as well."

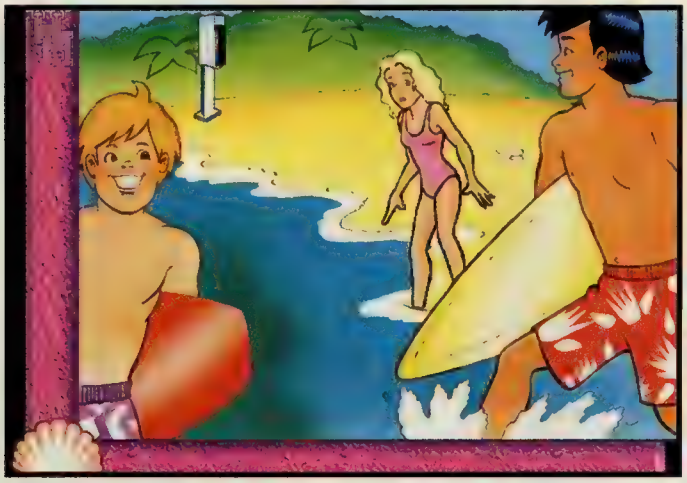
And don't think the Hawaiian setting for her game was an accident — Robbins is a seasoned traveler who's been to Hawaii at least once per year for more than a decade. She also enlisted the help of the Hawaiian Visitor's Bureau for side-games and learning sequences, such as a guide-book of terms, a lesson on the coral reefs, or a puzzle about endangered animals.

Repeating the Grade

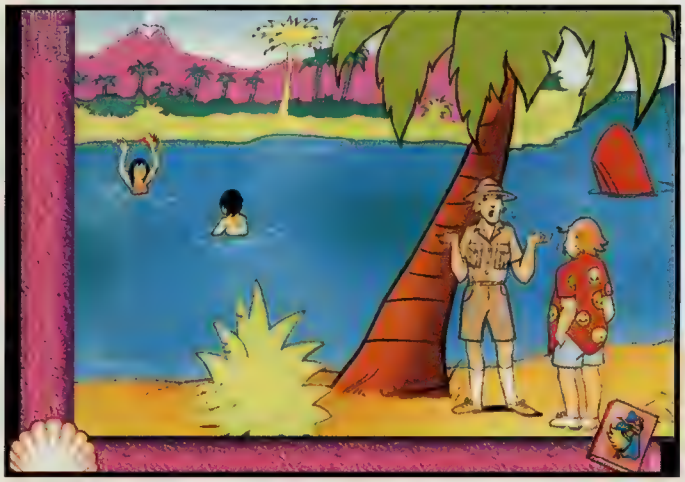
"I've written a proposal for the second adventure," says Robbins, who's also written the well-received book *A Century of Women Cartoonists*. "But it's not in cement yet. The second adventure takes place on Kaui. The girls get caught in a hurricane along with other adventures, and I've also brought in the Menehuni, the little [leprechaun-like] people of Hawaii."

Although the second *Hawaii High* game is tentatively scheduled for a fourth-quarter release, Sager points out that Sanctuary Woods is treating it like any other game — waiting to see what the initial sales figures are for *Mystery of the Tiki* before giving the sequel final clearance.

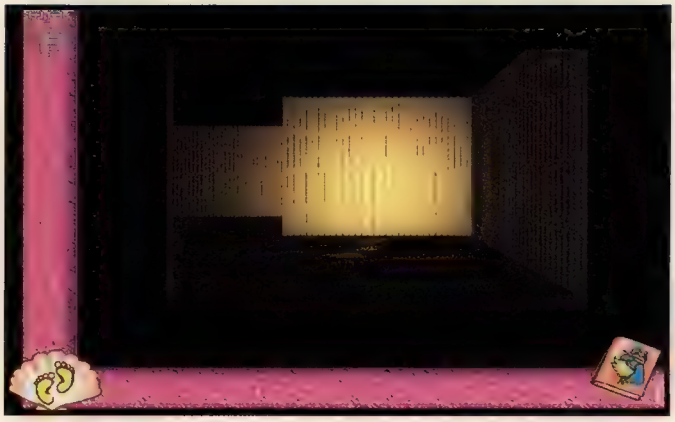
"We're waiting and seeing," she says. "We're aware that there aren't that many products for girls out there, so naturally we want to see how it does. But we're already planning new features — such as a diary as a game feature or add-on option. We have every confidence that the series will be successful."



Classes canceled when the surf's up? Sure, says designer Trina Robbins. "A friend of mine who's half Hawaiian said, 'Yep, that's Hawaii all right.'"



The missing tiki is in the hands of some bumbling crooks, so Jennifer and Maleah don't have much trouble out-smarting them.



The maze sequence is frustrating for adults, much less kids. Using chalk to mark the girls' path would have been a good idea.

Info

- Windows and Mac versions availalble
- $39.95 SRP
- Published by Sanctuary Woods, 1875 South Grant St., San Mateo, CA 94402 (415) 578-6340

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REFERENCE

Microsoft Art Gallery

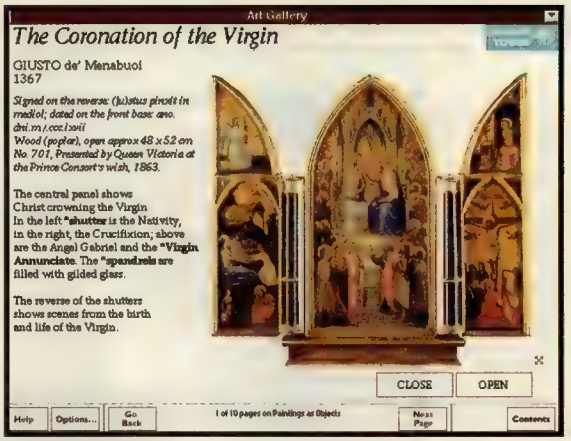
MPC $79.95

Microsoft One Microsoft Way, Redmond, WA 98052-6399 Phone: (206) 882-8080

Every so often, a product emerges in a young industry that reinforces one's belief in a new technology's potential. *Microsoft Art Gallery* is one of those products. Rich in content and interactivity, stunning in looks and layout, inspired in its organization, and simple but effective in its presentation of complicated material, this CD-ROM tour of the National Gallery of Art in London leaps off the screen and into one's heart.

Granted, Microsoft had a long lead off first base. The original work was created for visitors to the National Gallery, and was financed by a generous grant from American Express. Big budgets help, as do the presence of intelligent developers, in this case a firm in England.

But Microsoft has adapted the software to the home user, adding four guided tours which, through animation and narration, introduce the viewer to some fundamentals of painting, like



Featured paintings on this disc are from London's National Gallery of Art.

composition, perspective, and materials, as well as an artist's habit of changing his mind, revealed through the facility of X-rays.

Britain's National Gallery houses the country's collection of 2000 Western European Paintings spanning eight centuries. *Art Gallery* allows you to pick your way through the enormous collection, choosing any route that makes you feel comfortable, thanks to the flexibility of hypertext. Search, Print, Copy, Directional, Content, Options, and See Also buttons are easily accessible.

Exploration starts via four paths: Artists, Historical Atlas, Picture Types, and General Reference. This last is a glossary of technical terms and art-related references, which pop up on call throughout the text, and serve as a keyword guide. Click on Rembrandt, learn about his life, check related material about Amsterdam at that time — including a map — and then click on picture icons to study the individual works. Follow references to other masters whose lives Rembrandt affected, or to related subjects like portraits. Or pick Amsterdam in the year 1600 and gather icons of all the National Gallery's pictures painted in Rembrandt's time.

Art Gallery's ease of use encourages plenty of roaming. Many pictures expand to 640 x 480 pixels, providing fine views, and close-ups of important details. I found myself watching

You can explore an abundance of information about each work of art.

animated explanations — such as that of the visual trick *anamorphosis* over and over again. It's tempting to say that, with *Art Gallery*, there's no need to visit the National Gallery again. That's an exaggeration, of course, since nothing can replace the real paintings. But *Microsoft Art Gallery* comes close.

— Anne Gregor

Depth of Information:
Interface:
Visuals:
Audio:
Overall:

7 Natural Wonders

Windows $99.95

InterOptica 300 Montgomery St., Ste. 201, San Francisco, CA 94104 Phone: (415) 788-8788

Don't mistake 7 *Natural Wonders* for "The Great Natural Wonders of the World." Only some of the phenomena featured here deserve both designations. The annual wildebeest migration of East Africa, for instance, is impressive, but not as singularly "grand" as the Blue Whale or Mount Everest.

Through an animated sequence, *Wonders* illustrates how the blue whale evolved from a wolf-like animal.

This product follows InterOptica's *Great Wonders of the World, Vol. 1*, which profiled manmade marvels such as the Pyramids and the Empire State Building. The same interface and delivery is used here, and, as in *Great Wonders*, the same sense of excitement is evident.

You'll find individual "programs" dedicated to each of the seven wonders (the Grand Canyon, Mount Everest, the Blue Whale, the Indian Monsoon, the Great Barrier Reef, the Amazon Rainforest, and the Wildebeest Migration). The easy interface keeps you one click away from another attraction.

Each program contains an average of ten departments, starting with a narrated

The top of the world is just a click away: each natural wonder has an interface similar to the Mount Everest menu screen.

slideshow designed to spark your interests. After the overview, you can concentrate on the subject's geography and geology, its flora and fauna, and intriguing facts and figures. The multimedia elements in 7 *Natural Wonders* aren't quite as fabulous as those showcased in *Great Wonders, Vol. 1*. The videos are acceptable, but more would have been better.

There are plenty of nifty animations that superbly illustrate natural processes, everything from the formation of canyons and coral reefs to Amazon rainforests recycling soil nutrients.

The audio is fair, but skimpy. As with video, we aren't given enough to generate a sense of multimedia razzle-dazzle. There's only a bit of whale music in the blue whale program, and there aren't any samplings of the rainforest's exotic jungle sounds. I wanted to actually *hear* a wildebeest stampede. Not every program here could contain sfx, but some location recordings would have improved things.

Regardless of that gripe, 7 *Natural Wonders* shines in the same crucial area that the first product did — its knowledge base. InterOptica does its homework, offering an abundance of facts about each subject. Sample trivia teaches that the mighty blue whale's heart is the size of an automobile, a plucky Sherpa scaled Everest a record six times, and that the Grand Canyon's Colorado River moved 27

A sea of umbrellas greets the Indian Monsoon season, and excellent photography puts you there.

million tons of sand and silt in one day. Remarkably thorough information like this is the software's greatest strength. InterOptica produced 7 *Natural Wonders* in conjunction with the Sierra Club, which will benefit from some of the proceeds generated by sales. That's a good reason to support this software, but fortunately, it's not the only one.

— *Phill Powell*

Depth of Information:	
Interface:	
Visuals:	
Audio:	
Overall:	

Home Medical Advisor Pro

Windows $99.95

Pixel Perfect 10460 S. Tropical Trail, Merritt Island, FL 32952 Phone: (407) 779-0310

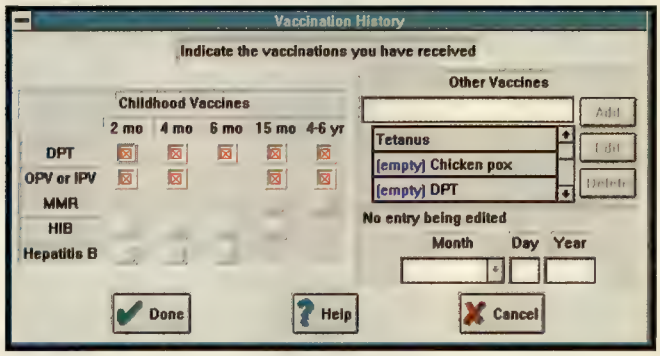
It's late Sunday night and your four-year-old son has a fever and a runny nose. At first, you're tempted to write it off as a cold and keep him home from preschool. Then you notice a rash on his stomach. Could these symptoms be related?

When your doctor's office is closed, you can access your own medical clinic by sliding *Home Medical Advisor Pro* into your Windows-equipped PC. Used in conjunction with regular doctor visits, this multimedia reference and diagnostic disc can save you from unnecessary — and expensive — visits to the emergency-care center.

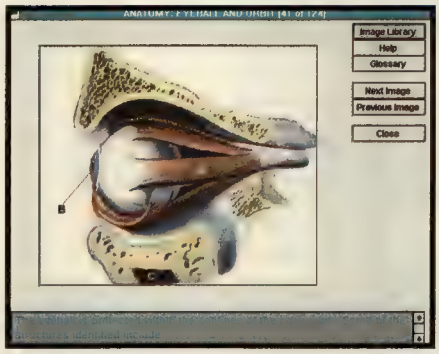
In addition to its exemplary and complete medical references, this CD-ROM can also school students and their parents in human anatomy and disease, hold medical records for each individual in a family, and explain medical tests that your doctor may have recommended.

Home Medical Advisor Pro uses an uncluttered screen equipped with clearly labeled buttons that place the entire contents of the CD-ROM within easy reach. While some buttons require a double click, others require only one — unnecessarily confusing to users. Several avenues into the information are available, from global scans of the data by keywords to specific selection of text, image, or video (when applicable) related to specific subjects.

The main categories include Disease, Injury, Poison, Test, Prescriptions (Rx), and Health and Diet. When any of these buttons are selected, a list of available subjects appears at the top of the screen, with a detailed explanation directly underneath. Highlighted words serve as links to the program's extensive glossary; you may click on a highlighted word and the program will display a definition.



Medical records, such as vaccinations, can be kept for each member of the family.



The program offers a variety of anatomical explorations for study purposes.

Photographs and illustrations help to clarify certain explanations. Some entries are accompanied by video clips (a runtime Video for Windows driver is included). Images and video clips must be accessed through separate libraries; they're not linked to specific explanations, nor is there any indication (such as an icon) that an entry has an accompanying graphic. Video clips are narrated, but glossary terms are not pronounced.

One of the more interesting uses of *Home Medical Advisor Pro* is as a home-based diagnosis tool. Within limits, and without guarantee, the disc can determine possible causes for specific symptoms, from anxiety to wheezing. The program provides a series of questions to which you answer yes or no, then based on your responses points to a possible cause (if it's unclear. the program suggests a visit to your doctor).

Even more useful is the program's recordkeeping functions. The CD-ROM version includes a means of storing medical records and health profiles for each family member. Also included is InteRact, a cross-referenced database of prescription and over-the-counter drugs that explains complications that may result when those medications are mixed with certain foods or drinks.

Despite its excellent recordkeeping functions, the program doesn't refer to those records when making a diagnosis. Each symptom is viewed on its own. Sometimes this can work fine — as with a simple case of chicken pox. Other times it's more problematic — a sore knee can be diagnosed as a fracture.

Personal physicians have access to patient history and, in the best cases, have an ongoing relationship with the patient. A reference like *Home Medical Advisor Pro* can serve as a backup to that relationship, and can help patients understand the diseases, symptoms, injuries, and tests they may face. It offers a simple path into complex information, and that's always useful.

— *Peter Scisco*

Wines of the World

Windows/Mac $59.95

Multicom 1100 Olive Way, Suite 1250, Seattle, WA 98101
Phone: (206) 622-5530

If you're looking to stock a personal wine cellar, consult a desktop sommelier. But if you're simply wanting to learn more about wine, Multicom has the CD-ROM reference for you. Based on the book *The Companion to Wine*, *Wines of the World* offers an in-depth tour of wines from the vine to the decanter, a database of over 20,000 specific wines, and a glossary of terms.

The browser feature accesses a database of more than 20,000 wines.

Wines begins with a choice of general topics, such as Wine Quality, Wine Region, and Wine Appreciation, opening the complex world of wine to the uninitiated. The elements that comprise *wine quality*, for example, run the gamut from climate and soil conditions affecting vine cultivation, to the many varieties of grapes, to the wine-making process itself.

Using photos, narration, video, maps, and text, the disc explores everything from the subtle differences between grape varieties to the entire process of vintification, and from grape harvesting to bottling. Archival video of peasant grape-pickers contrasts sharply with video of a mechanized harvester used at Taylor wineries, illustrating the dramatic changes in the wine industry in this century.

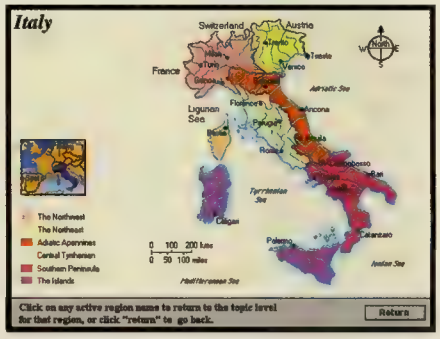
Understanding wine color is one of the topics of study.

While French and Italian varieties are, perhaps, the most celebrated, the Wine Region section details wine-producing regions from around the world, including the unsung wines of the Far East and North Africa. Each profile includes the type of wines produced, a history of grape cultivation in the area, as well as photos and maps.

One of the most unique aspects of *Wines* is the Growers' Views. Here, photos and narration by prominent vintners about their vineyards and wines offer personal glimpses into the growers' love of grapes and wine making.

The mystique of wine rituals and terms is often intimidating to many of us. Wine Appreciation, however, combats those fears as it guides users through several levels of wine experience. "Red with beef and white with fish" has become the casual wine-drinker's mantra, but the Wine and Food section delves much deeper, suggesting specific varieties of red or white wine for each type of food, including wines for each course. Now you can consult your personal PC sommelier as you plan your dinner party. With text and photos, *Wines* explains wine-tasting rituals, displays glasses of red, white, and rose wines to illustrate varying colors and qualities, and decodes wine-label terminology. For wine beginners, the Serving and Storage section offers videos on how to open and pour a bottle; connoisseurs will appreciate the intricate details of the optimum storage temperatures for specific varieties.

The Wine Browser feature will also appeal to both novices and connoisseurs with its database of over 20,000 wines,



The Wine Region section provides details on regions from around the world. Included are profiles on wines produced, a history of grape cultivation, plus photos and maps.

offering searches for wines by type, producer, vintage, price, or rating. (It's best to initiate tightly defined search criteria, because even with a double-speed CD-ROM drive, the searches were often interminably slow.) Users can add their own notes about a particular wine for future reference, and even build a personal wine list.

Wines of the World can serve as a reference guide to wine selection, or as an introductory course on wines and wine making, offering a wealth of information in a handsome package.

— Elizabeth A. McDonald

Depth of Information:
Interface:
Visuals:
Audio:
Overall:

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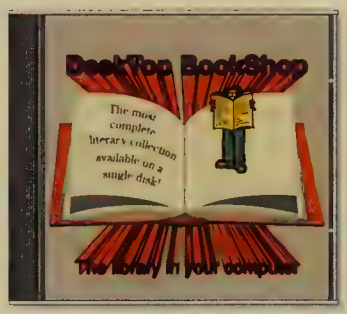

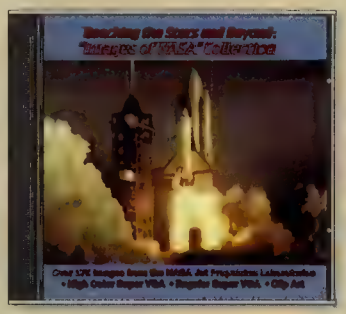

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Product Information Number 175

Exploring Ancient Architecture

Windows $59.95

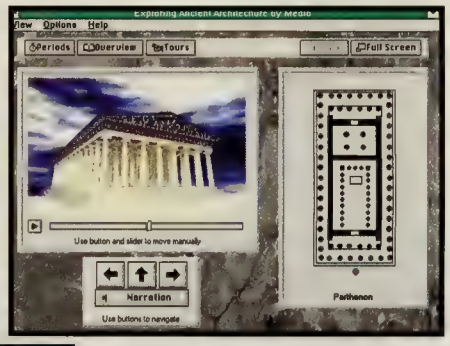
Medio Multimedia 2703 152nd Ave. N.E., Redmond, WA 98052 Phone: (206) 867-4142

It's tempting to think that a few elaborate computer-generated movies will lure the consumer into accepting a small amount of information. Certainly the three-dimensional, compter-generated reconstructions of Neolithic, Roman, Egyptian, and Greek structures in *Exploring Ancient Architecture* are impressive. As the Parthenon comes into view, for instance, perspective shifts, and you feel as if you were walking among the columns of ancient Greece.

Rotating the columns shows off the varying styles used by the Egyptians in their buildings.

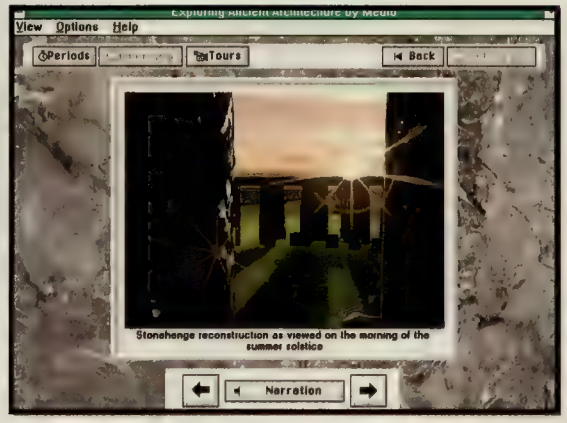
Exploring Ancient Architecture comes from the publishers of the much acclaimed *JFK* [reviewed last issue]. They've given it a coolly classical look, appropriate to the subject matter. The narrator's voice is unobtrusive and pleasing. The interface is simple, making for an easy voyage through the software. Buttons arranged across the top of the screen move you quickly between sections and topics. One particularly welcome feature is a slider, which allows you to manipulate the animations manually, slowing and stopping them at will. The videos will also run full screen.

The program is divided into four sections — Neolithic, Egyptian, Greek, and Roman. Within each one, there's an overview, and a tour of selected buildings. However, pictures and narration overlap between the overview and the tours, reducing the amount of new material. Predictably, some of the buildings studied in more depth are the Parthenon and Stonehenge. Others are not so well-known, such as the Dolman Tomb in Brittany, and Egypt's Mortuary Temple of Mentuhotep.



A red dot serves as a location guide as you travel through the Parthenon.

Computer-generated reconstructions reveal the design and importance of arches in Roman buildings.



Captures created from the animations, such as this one of Stonehenge, illustrate the narration.

Exploring Ancient Architecture, whets the appetite for more detail, which, right now, is still better provided by a well-designed book. The overviews are once-over lightly, with lots of pictures of buildings, some art objects, and a few animations of structural details. The lack of more comprehensive coverage is a disappointment. Irksome spelling errors such as Brittany with one "t" also shake one's confidence.

The designers, realizing that people like to know where they are standing, even in a modified virtual reality, have cleverly placed a drawing of the building beside the movie screen. As you move inside, or tour the interior, a red dot in the drawing on the right shifts to show your position.

With *Exploring Ancient Architecture*, Medio has brought to the computer screen another subject in which CD-ROM can shine. The ability to bring important buildings to life on the screen is exciting. Unfortunately, this disc demonstrates only the beginning of what can be done.

— Anne Gregor

Depth of Information:
Interface:
Visuals:
Audio:
Overall:

USA Today: The '90s, Volume I

Windows $69.95

Context Systems 2935 Byberry Rd., Hatboro, PA 19040
Phone: (215) 675-5000

If it's Mcnuggets of information you're wanting, look no further than the fast-food of U.S. journalism — *USA Today*. The newspaper has received criticism for its short-attention-span approach to information, but no one can argue with its success. Its writers may not earn Pulitzers, but they're read by millions each day.

USA Today: The '90s, Volume I contains the full text of each of some 112,000 stories the newspaper ran between January 1, 1990, and August 31, 1992 — everything, it seems, but the colorful weather maps. You get the complete text of all the stories, the photos (if any) that ran with them, and in 50 or so cases, a brief sound bite.

As in the newspaper, topics are divided into Top Events, News, Money, Sports, and Life, with a Quick Look section that includes spot and feature photos. There's a timeline of events covering major stories month by month, and an atlas that points out dozens of locations.

For some of the top stories of the disc — the War in the Persian Gulf, AIDS, the Recession, and a handful of others — you can click on a camera icon and bring up not only the photo that accompanied the original story, but also a sound bite. Clear audio lets you listen to Anita Hill testifying during the Clarence Thomas hearings or former President Bush announcing the liberation of Kuwait. But these are fairly infrequent, and video footage would be more impressive — but, of course, fill more disc space — than still photos.

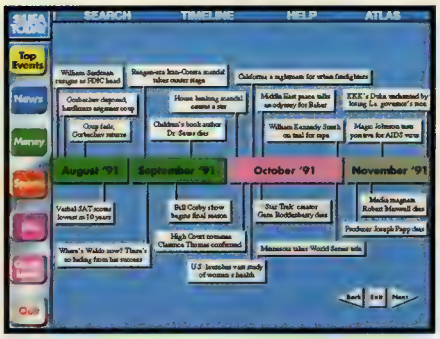
The best thing about *USA Today* is its search utility, which makes it a fairly valuable resource. You can check out more than 75 references to Indonesia and an equal amount about Arthur Ashe — if you remember, *USA Today* was responsible for initially disclosing that the tennis star was suffering from AIDS.

The search option isn't without its problems, however. If you run a search on "Bath, England," for example, you end up with dozens of selections — but only one really mentions the city. The rest are about blood baths, or the Bank of England, or companies taking a bath ... you get the picture.

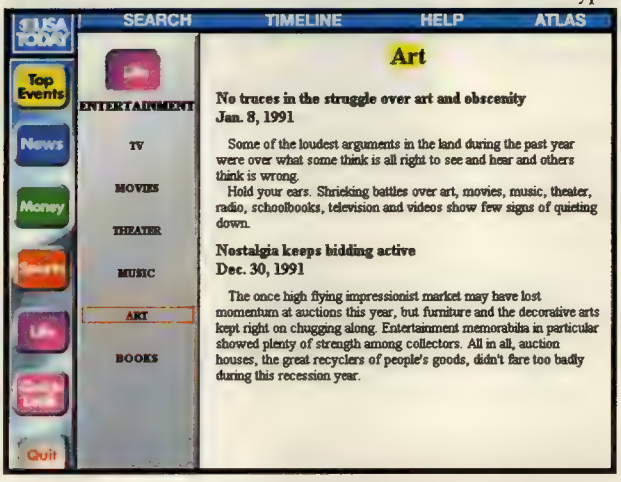
Likewise, the atlas is somewhat lacking. For a newspaper that's known for its bright colors, the atlas is a disappointing aqua and beige. It's easy to click on a name or type in your selection, but you'd better have some idea of where it is before you begin. Instead of moving from a global view (although latitude and longitude are marked on a small globe in the upper left), the atlas immediately takes you in tight. So you find out that Recife, for instance, is between Fortaleza and Savador. But you must zoom out to discover you're in Brazil, and when you do, the dot marking Recife disappears. You can also zip in tighter, but no additional cities or geographical landmarks are added if you do.

USA Today is an interesting disc to explore, and it can be fun to thumb through all the references to "Quantum Leap" or Anne Rice, junk bonds or Marlin Fitzwater. You can globe-trot without leaving your desk and follow the timeline of the Mia Farrow-Woody Allen breakup. But the coverage is only as deep as in its namesake paper, so if it's the behind-the-scenes stories and investigative reports you're looking for, you'll probably need to go elsewhere.

— Leslie Mizell



Check out major stories as they unfolded from the monthly timeline.



Take a walk on the wild side with the atlas feature.

Category listings take you quickly to your area of interest.

Depth of Information:
Interface:
Visuals:
Audio:
Overall:

Astonishing Asia

Windows/Mac $49.95

InterOptica Publishing 300 Montgomery St., Suite 201, San Francisco, CA 94104 Phone: (415) 788-8788

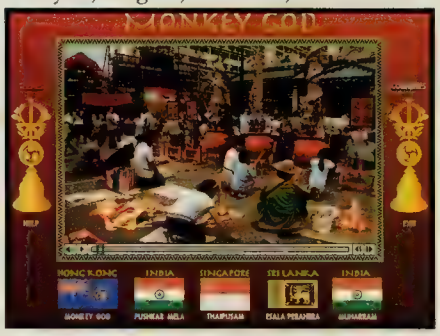
Television gives us instant access to events occurring halfway around the globe, and lets us "visit" places we'd otherwise never see. Multimedia software can give us the same glimpses, but its interactive element lets us control what we see and when.

InterOptica's *Astonishing Asia* entertains while it educates. It's the culmination of a 14-year Asian trip taken by photojournalists Earl and Nazima Kowall, and is a guide to the beliefs and customs of several Asian nations. It includes more than 30 minutes of digital video and over 600 color photos, many of which have never been seen in the West.

Astonishing Asia's opening screen illustrates the variety of themes you can explore.

Composer Ken Andruk created the original music that accompanies each theme.

Astonishing Asia's opening screens give you a taste of the audio/video quality and navigational simplicity of what's to come. After watching and listening to a brief opening narration, you can jump in and start exploring on your own. Click on icons that represent the program's 11 countries and 40 themes, and watch short photo and video vignettes. Explore rituals, lifestyles, religion, medicine, and stimulants in countries like India, Nepal, Pakistan, and Singapore.



Hong Kong celebrates its ritual of the Monkey God every fall.

For example, you can learn about a curious addiction that affects the majority of Yemen's 14 million people. Every day after 2:00 p.m., residents there get intoxicated after chewing on the leaves of the qat plant. Watch the birthday of the Monkey God celebrated in Hong Kong; a medium, having fallen into a trance, washes his face in boiling oil, climbs a ladder of sharpened blades, and runs barefoot through a bed of burning coals, symbolic of the Monkey God's dedication to its master.

Learn about the Dards, the last pure Aryan race, hidden in the hard-to-reach peaks of northwest India. Sought unsuccessfully by Hitler during World War II, the Dards have managed to maintain the purity of their blood, though this has led to successive generations of inbreeding. The group's women are now infertile,

Astonishing Asia explores the traditional medical practices of several countries; here, a short video explains South Korea's Hanyak Medicine.

The Dards are nearing extinction in their hideaway in the mountains of India.

rendering the Dards extinct.

Astonishing Asia, though, doesn't just focus on the sensational — you can get a glimpse of slum life in India, or learn about Mother Teresa's work.

So many of today's multimedia products are comprised of existing knowledge that's been rearranged a bit for the new medium. While that kind of format is often valuable, what the Kowalls have done with *Astonishing Asia* is invaluable. There are splashier, sharper products around, in terms of audio and video quality, but this product reveals hidden cultural treasures that are important to preserve.

— *Kathy Yakal*

Depth of Information:
Interface:
Visuals:
Audio:
Overall:

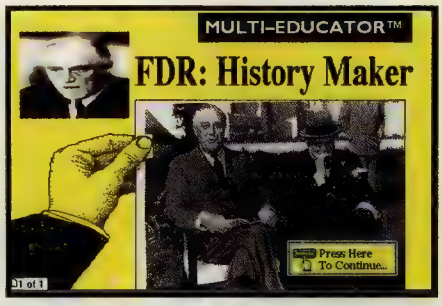
History Maker — Franklin Delano Roosevelt

Windows/Mac $54.95

Computer Vistas 13 S. Division St., New Rochelle, NY 10805 Phone: (800) 866-6434

Computer Vistas, as part of its "Multi-Educator — History Maker" series, has created what it calls a multimedia supplement to traditional textbooks. The primary intent is for student exploration and classroom or homework assignments.

The greatest strengths of *Franklin Delano Roosevelt*, one of this series' titles, lie in the implementation of dozens of video clips ranging from, say, half a minute to three minutes. Many of them were obtained from national archives and from Universal Studios' newsreels. To actually see the people and hear their voices is remarkable, even if the images are grainy at best.



When *FDR* starts, you see him "morph" from robust child to gaunt old man..

Here's the gripe: There's actually quite a lot here for any serious student to play with — texts of speeches, still images, audio clips. But the production values are absolutely bottom-of-the-barrel. *FDR* uses Asymetrix' *Toolbook* presentation engine, and unfortunately the user interface turns out static, buggy, and as dull as dishwater. If this is indeed meant as a supplement for classroom/homework use, the student had better be head-over-heels in love with history if he or she is going to plow through to the other side of the field.

In short, rare audio and video; but its production values make it look more like a student project than a project for students.

— Selby Bateman

FDR suffers from low production values, but does feature rare video and audio.

Depth of Information:	
Interface:	
Visuals:	
Audio:	
Overall:	

GET TO THE HEART OF THE MATTER

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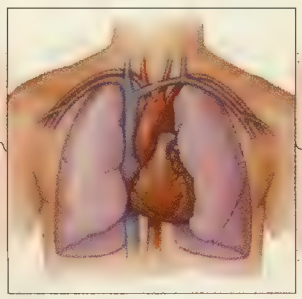
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IVI PUBLISHING

Product Information Number 115

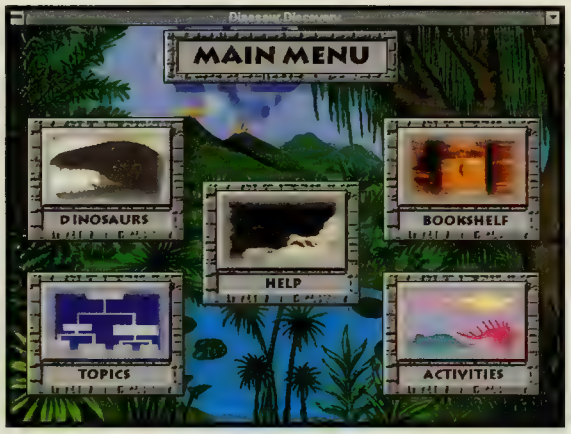
Dinosaur Discovery

Windows $39.95

Applied Optical Media 1450 Boot Rd., Building 400, West Chester, PA 19380 (215) 429-3701

While this CD-ROM doesn't break any new ground in dinoware, it's a solid reference work. *Dinosaur Discovery* contains information on 150 dinosaurs and other animals from the Triassic, Jurassic, and Cretaceous periods.

You can start by getting an alphabetical listing of dinosaurs. Choose one to view a color illustration, hear its name pronounced, learn more about the period in which it lived, and view a world map showing where its remains were found. Each entry also includes a lengthy text description, a chart showing the animal's relative size, and details of its classification.



The versatile interface offers a number of entry points to the program.

Data is accessible from several points, thanks to a versatile and friendly interface. You can browse through information in the Bookshelf, where you can study dinosaurs by size, classification, or period.

In the Chronicles section, you can learn about dinosaurs and methods for studying them. The categories here, highlighted by slideshows and audio narration, include fossils, appearance, evolution, behavior, and extinction.

Dinosaur Discovery is not first-rate multimedia. Audio is limited to pronunciation of dinosaur names and some narration of text, and visuals are limited to slideshows. A few animations might liven up the program.

This title is strong as a reference, but the competition in the dino category is very stiff. As a result, we suggest you study what's available before making a purchase decision.

— Lee Buchanan

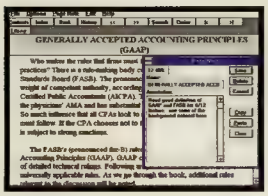
Depth of Information:
Interface:
Visuals:
Audio:
Overall:

Business Library, Volume 1

Windows $59.95

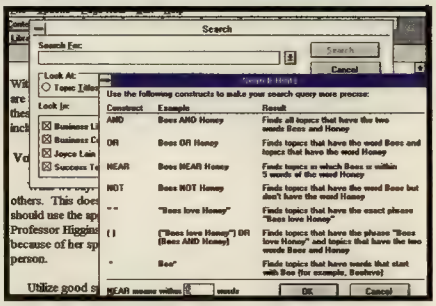
Allegro New Media 387 Passaic Ave., Fairfield, NJ 07004 Phone: (201) 808-1992

Business Library calls on the expertise of several noted business writers by including the complete text of 12 best-selling volumes: *Business to Business Communications Handbook*; *The Feel of Success In Selling*; *Finance & Accounting for Nonfinancial Managers*; *How To Get People To Do Things Your Way*; *How To Make Big Money in Real Estate in the Tighter, Tougher 90's Market*; *International Herald Tribune Guide to Business Travel EUROPE*; *Joyce Lain Kennedy's Career Book*; *Meetings, Rules & Procedures*; *State of the Art Marketing Research*; *Successful Direct Marketing Methods*; *Successful Telemarketing*; and *Total Global Strategy, Managing For Worldwide Competitive Advantage*.



A handy feature: You can take electronic notes at any time.

Even if you only wanted to read only half of these books, this CD-ROM is a bargain. If you want to do more selective reading, you can use the program's simple search tools. Do a simple or Boolean search within one or more of the books to locate all sections related to a topic. Insert a page note anywhere to record your reaction or a reminder. Click on "hot spots" to make a linked hypertext jump or to see a hidden image. Or cruise through pages, adjusting the speed of movement. Navigation is simple; you can click on icons or buttons with the mouse, or use keyboard commands.



Finding related information across volumes is easy with a simple or Boolean search.

With no audio and few graphics, *Business Library* isn't a multimedia application — but it is an intelligent compilation of some excellent business tutorials for an attractive price.

— Kathy Yakal

Depth of Information:
Interface:
Visuals:
Audio: N/A
Overall:

AmericaAlive

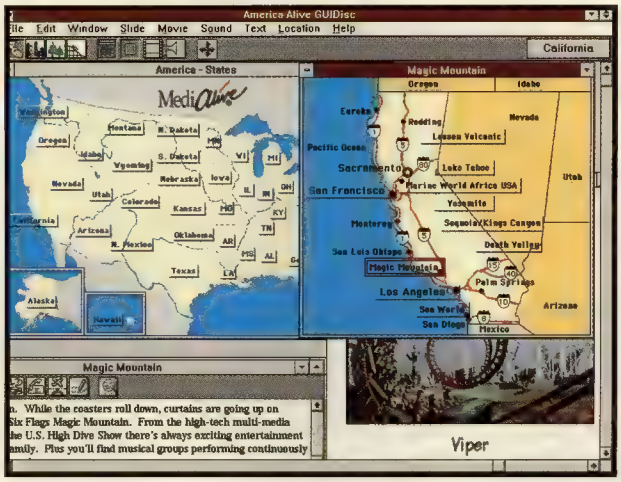
Windows/Mac $69.00

MediAlive 766 San Aleso Ave., Sunnyvale, CA 94086
Phone: (408) 752-8500

This first of MediAlive's GUIDiscs, designed to tempt the viewer from armchair to outside world, arrives with maps, slides, video, and a text window containing information about climate, geography, sights, sports, hotels, entertainment, and a raft of services.

Navigating through this thicket of information is simple. National parks, state names, cities, and theme parks appear at the click of a button. Somewhat detailed maps of cities and states pop up with more mouse work.

That said, *AmericaAlive* is something of a risk to the traveling public. It's an ambitious program with more than its share of troubling errors, lack of detail, and odd omissions. Since I live in Los Angeles, I tested the program's information about the area, and found it wanting. In some cases, the mistakes are downright silly.



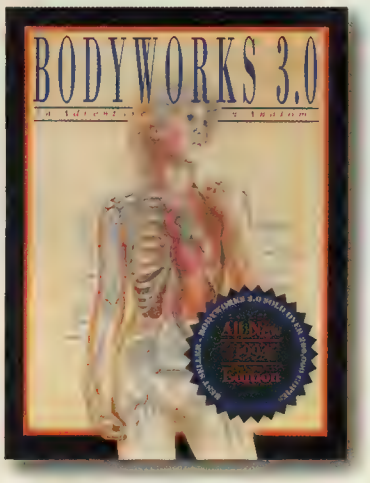
Navigating is clean and simple – what you'll find at your destination, though, is another matter.

The movie and slide portion of the program is even more frustrating. Many of the movies are annoying clips about commercial theme parks. Slides flash by with nothing but a simple caption and no further information.

Photography buffs can print any of the slides and video frames. There's a calendar and notepad to help plan trips, and a facility to dial directly the hotels mentioned in its limited list. All good ideas, but a thorough American travel guide is still a better bet, and a good deal less expensive.

— Anne Gregor

Depth of Information:	
Interface:	
Visuals:	
Audio:	
Overall:	



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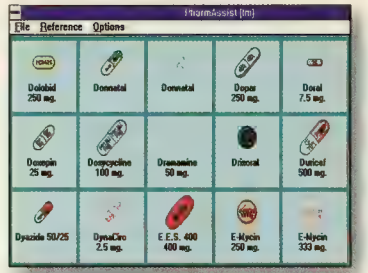

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Product Information Number 173

World Religions

Windows $69.95

Quanta Press 1313 Fifth St. S.E., Suite 208C, Minneapolis, MN 55414 Phone: (612) 379-3956

Literally thousands of belief systems have jostled for preeminence over the past several thousand years, with only a handful achieving a lasting or at least temporary importance. Sorting through this tangled web of beliefs, laws, rituals, symbols, and philosophies can be a tricky affair without the proper reference. *World Religions*, a recently released CD-ROM from Quanta Press, provides an effective introduction to the 16 predominant religions of history.

Sixteen major religions are on this disc.

The efficient and well-designed Windows interface that drives *World Religions* is a remarkable improvement for Quanta, which has in the past burdened users with ineffective, low-rent search utilities. Using a symbol associated with each religion (such as the cross, Star of David, or Yin/Yang symbols), you can call up a wealth of information on that religion. There are 16 faiths covered, ranging from mainstream faiths, such as Christianity, Islam, Judaism, and Buddhism, to somewhat more obscure religions such as Jainism and Zoroastrianism.

General information on the concepts of God, the soul, the afterlife, women's roles, and social structure, are supplemented by more detailed information in more than a dozen categories, such as founders, rituals, geography, or symbols. Altogether, the information is useful, clear, and easy to access.

Entries are illustrated with adequate line drawings and maps but, aside from a separate bundled CD of Christian hymns, contain no sound. A sampling of religious music and photos would have been welcome. Quanta also could easily have accommodated the texts of the holy books of each major religion (hundreds of megs are unused on the CD) and still had room to spare, making the product invaluable instead of merely very good.

— T. Liam McDonald

Depth of Information:	
Interface:	
Visuals:	
Audio:	**N/A**
Overall:	

History of the Blues

Mac/DOS/Windows $49.95

Queue 338 Commerce Dr., Fairfield, CT 06430 Phone: (800) 232-2224

The blues gets its due in *History of the Blues*, one of the best music-appreciation CD-ROMs I've seen. This disc is divided into four parts, each covering a major aspect of the music and its development. "Roots of the Blues" explores the origin of the blues within the context of the African-American experience. "Twelve-bar Blues" explains how blues music is constructed and how it evolved into the country blues of Robert Johnson, Son House, and others. The third part, "Classic Blues," discusses how the country blues evolved into boogie-woogie and the jazzy blues of vocal greats such as Ma Rainey and Bessie Smith. Finally, "City Blues" delves into the electrified urban sounds of Chicago and Memphis and how, through performers like Muddy Waters and B.B. King, it shaped newer forms such as rock and roll.

Country blues, classic blues, city blues — whatever your taste, it's here.

The interface is minimal, and songs are interrupted as the program moves from screen to screen. How I wished that the full score of individual blues songs were available on the disc as audio tracks! But the period art and photos, the insightful narration, which tells you just enough without getting in the way of the musical selections, and the music itself — and listening to it only makes you want to hear more — blend perfectly on this disc. It's as good an introduction to the blues as you'll find.

From here, you can explore a rich world of sight and sound.

— Steven Anzovin

Depth of Information:	
Interface:	
Visuals:	
Audio:	
Overall:	

Allegro PC Library

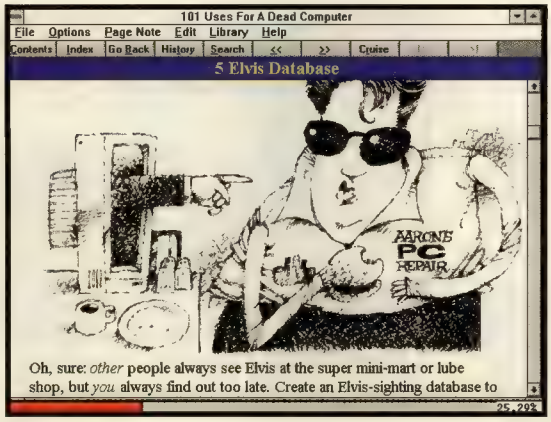
MPC $99.95

Allegro New Media 387 Passiac Ave., Fairfield, NJ 07004
Phone: (201) 808-1992

The Allegro PC Library, a disc reference archive of 30 widely known and well-respected computer manuals, is one of those ideas that must have looked better on paper than it ultimately does on disc.

The library consists of such popular volumes as *The Winn L. Roach Hardware Bible*, *Inside LANtastic*, and *The 10 Minute Guide to WordPerfect 6.0*, arranged into categories like hardware, networking, database, word processing, spreadsheet, and operating systems.

Several of these titles are already dated. *The Word for Windows Guide* deals with version 2.0, while *The 10 Minute Guide to Norton Desktop* is similarly one full release version behind. You can search for specific topics, cut and paste material into other windows, jot down annotations, and even have the program automatically scroll through the text for you with an adjustable cruise control. There's also a gallery of 50 different video clips illustrating such operations as installing a CD-ROM drive.



PC Library includes a light-hearted look at 101 uses for a dead computer.

Think about that for a moment....

Yes, that's the Catch-22, isn't it? If you're using the *PC Library* disc, then you've already installed your CD-ROM drive, haven't you? And if your system has just mysteriously crashed, then how can you access the Ooops! What to Do When Things Go Wrong manual on the CD-ROM? Of course, for the classroom or office with several computers, this may be moot — but for the individual user, it's a point worth considering.

— David A. Wade

Depth of Information:	
Interface:	
Visuals:	
Audio:	
Overall:	

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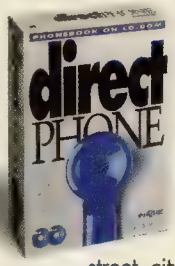

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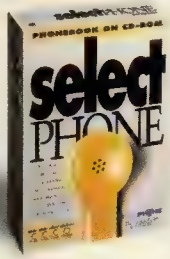
Product Information Number 157



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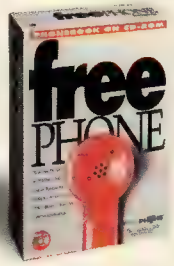

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The Legends of Oz

Windows/Mac $59.95

Multicom 1100 Olive Way, Suite 1250, Seattle, WA 98101
Phone: (206) 622-5530

We're definitely not in Kansas anymore. Since L. Frank Baum wrote his "modernized fairy tale," this beloved fantasy has been modernized on film, in recordings — and now on CD-ROM.

In a sense, the CD-ROM version fares better than the film version, which substituted Hollywood platitudes like "there's no place like home" for Baum's allegorical search for self. Presented on electronic pages, the original text is easy to read (though not narrated), and pictures are reproduced with good quality.

One enhancement to the original allows you to hear sections of the story as

An interesting twist is to hear sections of the tale narrated by different characters.

narrated by different characters, such as the Tin Woodman's telling of meeting the Kalidahs on the way to the City of Emeralds. (This is an intriguing example of how this technology is changing the way we read.)

The program's blocky animated sequences resemble a pop-up-book rather than film or video tape, and are less developed than that of most other interactive storybooks.

Also included are a selection of clips from the 1939 film. Songs from the film are here, but they're not from the original soundtrack — no Judy Garland. Biographical notes about the author are available for reading.

Three short tales, written by the author's great-grandson, Roger Baum, round out the disc. But these are marred by errors in grammar, spelling, and punctuation.

The Legends of Oz provides a new way of looking at a classic. For true Oz buffs, it's definitely worth having. For most others, however, it adds little to the wonder of the original story.

— Peter Scisco

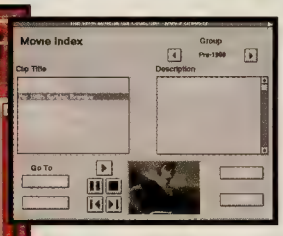
The Archives of U.S. History

Windows/Mac $79.98

MPI Multimedia 5525 W. 159th St., Oak Forest, IL 60452 Phone: (708) 535-1540

It seems as though movie cameras have been at almost every important event since the beginning of this century. From hand-cranked cameras filming the Spanish-American war, right up to a guy with a camcorder videotaping Rodney King's encounter with the LAPD, powerful images of powerful events have, for good or bad, played an important part in our society.

One of the leading sources of archival footage is the privately owned WPA Collection, which has footage dating back to the first halting motion pictures of the



MPI's main archival source: the private WPA Collection.

Although Archives of U.S. History *sounds like a historical reference title, it's a collection of 250 video clips.*

late nineteenth century, right up to the present day. Together with MPI Multimedia, WPA has created *The Archives of World History*, a CD-ROM based on this large collection of newsreel footage.

Though the title would indicate that this is a reference CD-ROM, it is, in fact, comprised of a simple engine and approximately 250 video clips (royalty free), varying in length from only a few seconds to a little shy of a minute. In the more recently released version (for Windows), all clips are in Video for Windows (.AVI files), and accessible though a variety of search and play engines. While this disc is an excellent source for historical .AVI files, particularly for multimedia presentations, it could have been even more useful with some historical commentary.

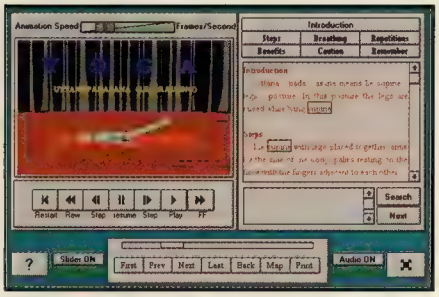
— T. Liam McDonald

Yoga!: A Multimedia Guide To Yoga

Windows $69.95

Quanta Press 1313 Fifth St. S.E., Suite 208C, Minneapolis, MN 55414 Phone: (612) 379-3956

This CD-ROM teaches you dozens of basic yoga positions and movements, as well as the theory behind the Indian physical/mental discipline. Animated figures perform each move as a voice-over explains it; text descriptions are also available. You can control the animation's speed, and pause or rewind it using onscreen VCR-like controls. You can also view it at full screen. Moving through the program is easily accomplished with the navigation buttons, and clicking on hot words yields in-depth information and definitions.



To learn the art of yoga, you can study animated figures, read text, and listen to a narration.

Yoga!, developed by Krea Technology, is a good implementation of a logistically problematic idea. If your computer work area has enough free space around it to let you perform the moves demonstrated, or if you can memorize and do them elsewhere, the training provided by the program is comprehensive, reliable, and top-notch. Otherwise, a good yoga book would work just as well.

— Kathy Yakal

Ratings:

Aladdin and the Wonderful Lamp

Windows/Mac $39.95

Ebook 32970 Alvarado-Niles Rd., Ste. 704, Union City, CA 94587 Phone: (510) 429-1331

Aladdin is faithful to the original, but fairly stiff.

Important purchasing question: How does this multimedia storybook stack up against Disney's smash movie/video?

Ebook's Aladdin *lets you control the story, sort of.* The viewer occasionally makes choices that affect the plot (does Aladdin choose door number one, two, or three?).

Ebook's Aladdin *is truer to the spirit of the original.* Did anyone really believe a genie would behave like Robin Williams? Here you get a standard issue genie, not a blue-tinted, wise-cracking one.

Blue-tinted, wise-cracking genies are lively. Despite a few animations and video clips of the story's narrator, this is a pretty stiff, if faithful, retelling of the tale. Kids could easily grow bored...and that includes the kid in all of us.

— Phill Powell

Ratings:

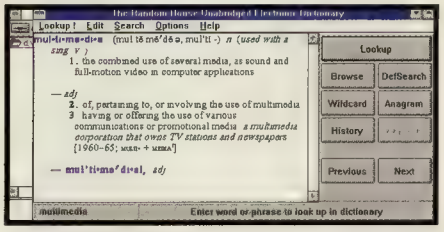
Random House Unabridged Dictionary: Second Edition

DOS/Windows/Mac $100

Random House Reference and Electronic Publishing
201 East 50th St., New York, NY 10022
Phone: (212) 751-2600

As the first American unabridged dictionary on CD-ROM, this is a tour-de-force reference work. The second edition, which debuted in print in 1987, has since been revised and updated to include new terms and names (e.g., *carjacking, chronic fatigue syndrome, Al Gore, CD-ROM,* and *celebutante*).

A great deal of thought was given to the utility of this CD-ROM. Run it in the background as you work on a document, and use the cut-and-paste function so that you can copy definitions, usage notes,



"Multimedia," along with many other words from the 90's, are included.

etc., to your current document.

One small drawback is the lack of audio, but the bounty of features overshadows its absence. The Wildcard option is a great help if you're unsure of a spelling, and a History feature holds the 20 most recently looked-up words. It's also hypertexted — click on any word in a definition to get that word's meaning in turn. Outstanding features abound in *Random House*, and it has wonderful browsing value.

— Lance Elko

Ratings:

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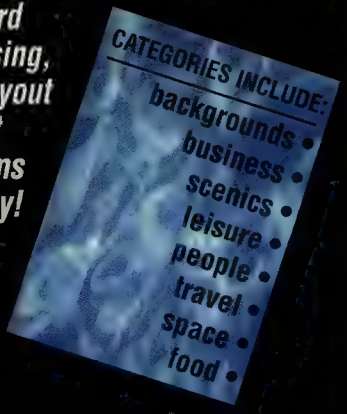

PHOTODEX
1781 Barcelona St. • Livermore, CA 94550
1-800-37PHOTO (1-800-377-4686)

Product Information Number 194

Origins of the Constitution

Mac/DOS $49.95

Queue 338 Commerce Dr., Fairfield, CT 06430
Phone: (800) 232-2224

I'm not going to grade on the curve for this title, even though I want very much to like what's attempted here. *Origins of the Constitution* is clearly an honest effort to create a learning supplement which lays out in a straightforward

George Washington's teeth aren't the only thing wooden in *Origins of the Constitution.*

manner the political events involved in establishing a national government, the colonial experience with the Articles of Confederation, and the process of ratifying the Constitution. It's meant as a classroom supplement, not as a complete course.

But using the product engulfed me in a deja-vu experience from two decades ago when I sat through a (then) state-of-the-art slide show with synchronized audio that moved glacially and non-interactively through much the same material.

In the age of multimedia and text linkage, this linear slideshow approach is, unfortunately, a throwback.

— Selby Bateman

Ratings:

999+ .WAV Files for Windows

Windows $19.95

Tropical Publishing P.O. Box 23591 Columbus, OH 43223 Phone: (614) 276-1000

If you want .WAV files, you got 'em. Over a thousand, in fact. And from every kind of sound you can imagine.

.WAV files contain the sounds you hear with most Windows programs — the fanfare that starts Windows, the chimes that end Windows, most of the speech, and some of the music. You need them if you're putting together multimedia presentations of just about any kind. What 999+ .WAV files does is provide you with a bundle — a big bundle.

There are plenty of .wav files on this disc, but filenames aren't very helpful.

All of them are filler. Little sound bytes, designed to spiff up a presentation by giving it a sound effect or a small clip from a famous cartoon or movie. Like "HAL from 2001: A Space Odyssey" or Scotty from Star Trek. They range from half a second to ten seconds in length, and from the neat to the pointless.

Problem is, you're not likely to hear them all. Filenames are hopelessly non-descriptive, so you're basically guessing whenever you try to find one. You can write down the filenames of those sounds you like or wish to use, but this is, obviously, quite tedious.

It's a useful enough disc, but far from exciting.

— Neil Randall

Ratings:

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STAR WARE PUBLISHING CORPORATION

Product Information Number 136

ENTERTAINMENT

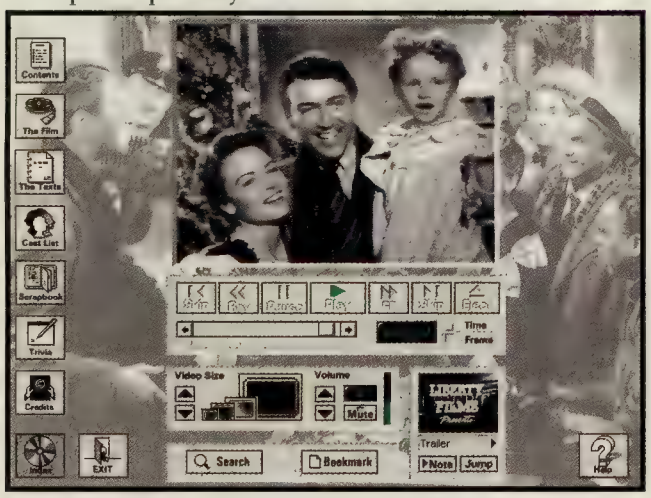
It's a Wonderful Life

Windows $79.95

Kinesoft 772 West Algonquin Rd., Arlington Heights, IL 60005 Phone: (708) 806-6538

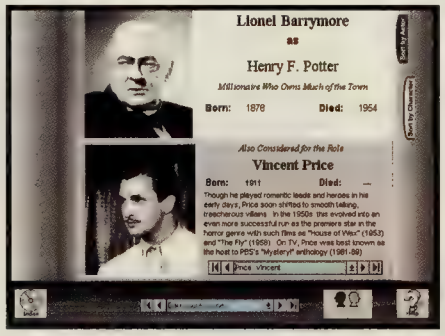
Kinesoft's publicity kit for *It's a Wonderful Life* claims that it's the first CD movie to be viewed on a personal computer, but surely that honor (provided we ignore several X-rated efforts) belongs to Voyager's CD-ROM version of *A Hard Day's Night*. That quibble aside, *It's a Wonderful Life* is a wonderful two-disc set — but its real significance may be the trend it augurs more than the way it presents a much-beloved classic.

The setup needs 6.5 megs of hard-drive space to provide you with a versatile array of navigational tools. The main menu offers the viewer a variety of access points. You can start watching the film, of course, or you can look at the original trailer. There are also stills, publicity shots, behind-the-scenes commentary, and even a trivia quiz. And you can read The Greatest Gift (the short story *It's a Wonderful Life* was based on), or browse through Frank Capra's final version of the script.



Kinesoft uses a familiar VCR metaphor to present the film.

But let's cut to the chase — how good is the picture quality? Better than you might expect. The image is clean, much more so than on some of those cheapie VHS tapes that were rush-released to capitalize on the film's copyright lapse, but obviously not as sharp as you would get from a laser disc. And the image stays acceptably smooth through four degrees of magnification from postage-stamp sized inset to full-screen dimensions.



You get background not only on who played each role, but also on other actors considered for the part.

Video tapes gave us a new way of viewing films, with slow-motion capability and almost instant replays of any sequence we wanted to examine. Laser discs added a host of ancillary materials and tools to delight the movie buff. And these enhancements are now available through the medium of CD-ROM.

At the touch of a button, for example, you can flip from any scene in the film to that precise line in the script and back again. Or you can listen to a voice-over explanation of how the ingenious special-effects team managed to recreate a convincing winter setting in the middle of a California summer. And you can read about how the studio originally tried to develop the property for Cary Grant, before Frank Capra came up with the perfect choice of James Stewart.

But what's the replay value in all this? That remains very much an individual decision. Personally, I would appreciate having "analytical versions" of *Citizen Kane* or *Casablanca*, but after an initial perusal of all its added details, I would prefer to enjoy the heart-warming sentiments of *It's a Wonderful Life* simply in its entirety and with maximum visual fidelity. This brings us back to laser discs. There's nothing offered by this CD-ROM that is not available through a high-end laser disc player.

CD-ROM enhancements include a generous selection of stills and publicity shots.

Kinesoft's CD-ROM presentation of this film favorite is clearly a signpost on the road towards multimedia convergence. As hardware capabilities improve and data-compression techniques inexorably advance, your CD player is going to become a one-stop center for all your computing, audio, and video enjoyment.

So will I be adding *It's a Wonderful Life* to my own collection? Probably not. Can I recommend it on its own terms? Very much so.

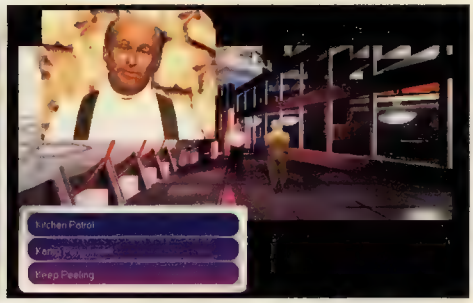
— David A. Wade

Depth of Information:	
Interface:	
Visuals:	
Audio:	
Overall:	

Quantum Gate

Windows/Mac $79.95

Media Vision 47300 Bayside Pkwy, Fremont, CA 94538
Phone: (510) 770-8600



Despite high-quality graphics and video, as well as good acting, *Quantum Gate* lacks where it counts – as a game.

This ambitious "interactive movie" offers some outstanding individual elements. Unfortunately, they don't add up to a satisfying whole.

Quantum Gate uses good graphics, professional actors, and decent video quality to tell its story. The year is 2057, and the Earth is on the brink of environmental collapse. Only a mineral from a hostile planet can save the atmosphere, and this planet lies in a parallel reality accessible through the Quantum Gate. As part of a large force assigned to protect the miners on this planet, you navigate throughout the base seeing video sequences that fill in the story.

Unfortunately, *Quantum Gate* is only marginally interactive. Several dialogue trees may change the outcome of a scene, but they do not affect the story itself. An attempt at a "virtual reality" video game segment fails due to poor graphics and slow movement, leaving the user with a "movie" that is only somewhat interactive.

As such, the story is frustratingly cryptic, and just when things begin to get interesting, it's over. Replay value is nil, and playtime is about two hours, making it a poor value. Despite some striking visuals and an intriguing premise, *Quantum Gate* fails to entertain, either as game or movie.

— T. Liam McDonald

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

Lenny's MusicToons

Windows $49.95

Paramount Interactive 700 Hansen Way Palo Alto, CA 94304 Photo: (415) 812-8200

You can jam from this mini-studio, where a variety of melodies, rhythms, and percussion tracks are available.

Pitch Attack, a space-invaders game, teaches the basics of sight reading the musical scale.

This CD-ROM is proof positive that making music with a computer doesn't have to be an exercise in frustration. The activities in *Lenny's MusicToons*' manage to hit the right musical notes for youngsters while maintaining enough humor to keep adults hanging around.

"Toon Jam" lets even the very young build and record "music videos" from a handful of musical and graphic building blocks. The selection of musical styles and cast of characters seem limited at first, but there's plenty of variety here.

"Lenny's Theatre" is an interactive Jam Session that lets you explore how different melodic, rhythmic, and percussive leads sound when backed by different "house bands."

"Puzzle Book" is a clever, musical jigsaw puzzle game whose complexity can be set to match the player's skills. A "Concentration" style card matching game is the weakest module here, with no "head-to-head" competitive option and only a single level of difficulty.

"Pitch Attack" teaches the fundamentals of sight reading the musical scale within the context of an alien-invaders arcade game.

Lenny's MusicToons is an unqualified smash on our musical hit parade. After weeks of use, our young play-testers are still singing this CD-ROM's praises.

— Arlan Levitan

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

Kid's Studio

Mac/Windows $59.95

CyberPuppy Software P.O. Box 19500, Rochester, NY 14619 Phone: (800) 787-2983

This CD-ROM turns the Macintosh desktop into a canvas for creative expression. It comes with several tools that youngsters can use to design multimedia slideshows containing photographs, original illustrations, sounds, and text. The program ships on floppies (not CD-ROM), but children can personalize a *Kid's Studio* presentation with pictures taken directly from a Photo CD.

When *Kid's Studio* launches, a "control panel" with six icons displays down the left side of a blank work screen. If you click on the icon of a "Treasure Chest," the program switches into "Treasure Chest Browser" mode, letting you view thumbnail representations of the program's 250 drawings and photographs. Treasure Chest pictures are organized by categories (such as history, nature, cartoons, comic strips, wild animals, and others). Each image is labeled for easy identification.

When you click on a picture, its brief text description appears. Double-clicking on an image adds its name to a "My List" window. Any "My List" picture copies to the *Kid's Studio* work screen, where it becomes a graphic object which you can move, resize, or even enhance with recorded sounds.

Double-clicking on a page's graphic object takes you directly to Paint Box, the program's drawing environment. Here you can modify the selected screen graphic using basic draw tools such as brushes, pencils, geometric shapes, and colors. Then you can return all or only a portion of the modified image back to the work screen. You can also draw your own graphics in the Paint Box by clicking on the Paint Box icon in the Control Panel. Unfortunately, Paint Box lacks a fat-bits editor for detailed editing. Moreover, the eraser (which comes in different shapes and sizes), is difficult to maneuver in tight places. When you're done with the drawing, use the lasso or one of several "cookie cutter" shapes to select all or just a portion of your drawing. If you select the glue icon from the Paint Box tool palette, you return to the work page with a copy of the newly created or edited graphic object.

Personalize presentations by importing Photo CD images.

Any *Kid's Studio* screen can have several layered or unlayered graphic objects, each with its own sound. Stories can have several screens (pages), complete with text descriptions or special text effects. When you select Play Story from the Story menu, you move into slideshow mode, automatically displaying story screens with accompanying sounds, text, and graphics. You decide whether the electronic slide show plays only once or in a continuous loop, how much of a delay there is between screen slides, or if there are any special transition effects from one slide to another. A "reorder sounds" command lets you change the order in which a screen's sounds play during a presentation. Slide shows are saved to disk in *Kid's Studio* format, or as QuickTime movies (for sharing with others who do not own a copy of the program).

Despite limited Paint Box capabilities, this versatile program has lots of storytelling potential. Children ages 6 to 60 will enjoy creating their own multimedia storybooks, with personal drawings, Photo CD images, and recorded sound effects. If you want a fast, fun way to produce dazzling electronic presentations or QuickTime movies, *Kid's Studio* can help you make your point in style.

— *Carol S. Holzberg*

Kid's Studio comes with a variety of tools to create slideshows containing photographs, illustrations, sounds, and text.

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

Plumbers Don't Wear Ties

MPC $29.95

United Pixtures, 1323 East Broadway, Suite 301, Glendale, CA 91205 Phone: (818) 502-0211

Jane obviously follows the "dress for success" guidelines.

We always laughed at the phrase "interactive game." What type of game *isn't* interactive? Well, *Plumbers Don't Wear Ties* isn't particularly interactive, and you may wish it were even less so.

This "game" is puerile, badly acted, and horribly written. There's so little interaction that it's like being stuck in a B-movie theater in hell. You're trying to get John and Jane together. John has a motorcycle and a beyond-stupid tie; Jane has an impressive set of implants and a bad bleach job. You watch scenes unfold as still photographs with voice-overs, then occasionally — *very* occasionally — make a decision affecting the plot.

Naturally, only the worst-case scenario gets you anywhere. Does the repugnant employer give Jane a job? Does he refuse? Or does he come across the desk at her? Just guess. Ick.

— Leslie Mizell

Rating:

WolfPack

DOS $39.95

NovaLogic 19510 Ventura Blvd., Suite 200, Tarzana, CA 91356 Phone: (818) 774-0600

This submarine-hunting game is still regarded by many as a classic, and rightly so. Now developer NovaLogic has brought this slightly dated game to CD-ROM with a gorgeous new introduction and 58 new missions. Surprisingly, the 1989 game holds its own against today's graphic-intensive war games.

Running silent and deep in the Atlantic Ocean during some of the most tense months of World War II, you control either German sub operations or Allied surface vessels. Hunting freighters,

WolfPack has the right stuff for a wargame – strategy, action, history, and dozens of missions.

warships, or other subs was a delicate business, demanding stealth and careful maneuvering before torpedoes could be unleashed.

WolfPack captures the thrill of sub warfare with a simple interface and a large array of new missions.

— T. Liam McDonald

Rating:

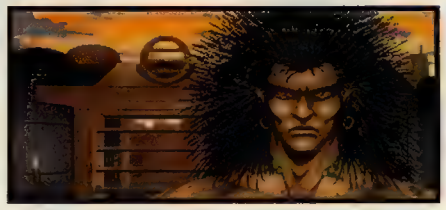
Might and Magic: World of Xeen

DOS $69.95

New World Computing P.O. Box 4302, Hollywood, CA 90078 Phone: (818) 889-5600

If you're looking for a first-timer's fantasy role-playing package, your choice has just become simple. *Might and Magic: World of Xeen*, a double-CD package, includes the two most recent games in the Might & Magic series, *Clouds of Xeen* and *Darkside of Xeen*. These are well-designed and unapologetically basic

After adventuring for several days, you'll have to see if you're ready to advance the next level.



role-playing games, with an interface that eases the genre's complexity.

You have six adventurers at your command: create your own, or use the one the comes with the disc. Soon after start-up, you'll see a window with a first-person viewpoint. Put on your headphones, head for the nearest tent, click on it, and listen to the mayor handing you your first quest. Wander around, knock off some monsters, and head for the training hall to rise to the next level.

Fun, consistent, and addictive.

— Neil Randall

Rating:

XPLORA 1: Peter Gabriel's Secret World

Mac *no SRP*

MacPlay 17922 Fitch Ave., Irvine, CA 92714
Phone: (714) 252-2820

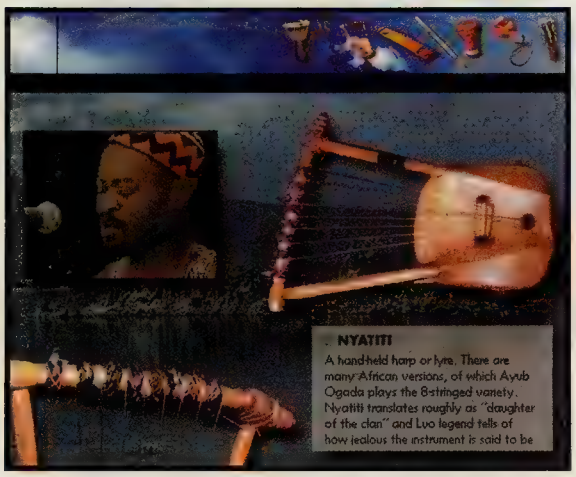
Several of Gabriel's critically acclaimed music videos, including "Kiss That Frog" are included in their entirety on the CD-ROM.

A few months ago I refrained from using the word "breakthrough" to describe any of the CD-ROM titles that have recently crossed my desk. I hesitate no longer.

XPLORA 1: Peter Gabriel's Secret World manages to shatter the barriers that have kept contemporary musical art from landing with both feet into the CD-ROM milieu. Whether one agrees with Peter Gabriel's politics or not, there's no question that he puts his music and personal resources on the line for what he believes, and does so with style and humor.

Fill in the face with the right eyes, nose, and mouth – and a "backstage pass" to otherwise inaccessible video clips in *XPLORA 1* is yours.

One of the founding members of the British band Genesis, Gabriel parted ways in 1975 to pursue a musical course that would range far afield from the pop charts. For over ten years, Gabriel's solo albums, which drew heavily on diverse musical sources, attracted a small but dedicated following. In 1987 he released "So," which propelled him into the pop world riding a rocket of a song called "Sledgehammer." Predictably, Gabriel met commercial success on his own terms. He continued to reside in the English countryside with his family, founded Real World Music, and expanded his involvement and support of musical and social causes.



The Nyatiti is one of the uncommon instruments spotlighted in Gabriel's overview of World Music.

XPLORA 1 artfully illuminates the music, friends, concerns, and passions of Peter Gabriel without turning narcissistic for a moment. It also opens our minds to the beauty of music that narrow Western views label as "third-world."

XPLORA 1's user interface has a beauty, simplicity, and grace that invites exploration and experimentation. The visual layouts are masterfully executed — sometimes soothing, at other times challenging the eye. Non-linear access of the disc's elements occurs naturally as one is prodded by unexpected events to jump from one digital venue to another.

"US" explores ten of Gabriel's songs, their lyrics and uncut Quicktime videos of "Steam," "Digging in the Dirt," "Blood of Eden," and "Kiss That Frog." Background information on the songs, videos, the art that Gabriel commissioned to go along with them, and the artists are only a mouse click away. The limited-edition booklet currently packaged with *XPLORA 1* is a piece of art in and of itself.

"World Music" lets you roam a series of QuickTime clips from last year's World of Music, Art and Dance festival in San Francisco; sample 40 albums of international music, and learn about exotic instruments. The musical smorgasbord is alternately enervating, unnerving, eerie, and beautiful. The stories behind the musicians clearly elucidates the higher

The "personal" side of *XPLORA 1* includes a Gabriel discography, photo album, and information on the activist organizations with which Gabriel is involved.

role of music in the family of man.

"Behind the Scenes" includes an interactive full-motion video stroll through the grounds of the Real World studio complex, where you can drop in on an interactive jam session or remix one of Gabriel's popular songs. If you've managed to collect the "backstage" passes that are scattered about selected screens, additional "insider" video footage is available for your perusal.

"Peter's Personal World" includes a discography of Gabriel's work, and information on Witness and Amnesty International, two of the human-rights organizations causes he has been working with. Since his involvement in such causes has been a matter of record for well over a decade, this Gabriel has every right to blow his selected horns.

As enthusiastic as I am about *Peter Gabriel's Secret World*, I'll be the first to admit that this CD-ROM may not be everyone's cup of tea. A few of the visual images may be too explicit for computer owners with delicate sensibilities...and those same folk would likely take offense at some of the colloquialisms in the accompanying booklet.

Over a year in the making, *XPLORA 1* is the collaborative child of Gabriel, Brilliant Media, and Real World Multimedia.

It's quite easy to say that it was time well spent. — *Arlan Levitan*

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

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EUROPE'S PREMIER MACINTOSH MAGAZINE

MACFORMAT

Speed

DOS/Windows $79.95

Knowledge Adventure 4502 Dyer St., La Crescenta, CA 91214 Phone: (818) 542-4200

If you've never seen an IMAX movie, do yourself a big favor and hurry to a screening at your local planetarium. IMAX is an overpowering experience, with an enormous picture that dominates your *entire* field of vision, right out to the periphery.

These movies are impressive because they're shot and projected in a radically oversized manner. Showing an IMAX film on a small screen, therefore, removes the element which originally made it so compelling.

What travels at 175 mph? Hint: It isn't the Lunar Rover.

Nonetheless, that's exactly what Knowledge Adventure has done. They've taken Greg MacGillivray's film "Speed" and used it as the centerpiece for *Speed*, a multimedia exploration into the human quest to...well...go faster.

The film "Speed" isn't really educational — and wasn't intended to be. IMAX films are more like amusement-park rides, designed to thrill rather than teach. That's why this historical overview emphasizes exhilarating visuals shot from first-person perspective — rollercoaster rides, downhill skiing, jet-powered drag racing, and experimental test flying. The movie is narrated by PBS personality James Burke ("Connections," "The Day the Universe Changed") and runs about 28 minutes when viewed without interruption.

You're encouraged throughout the film to pause the movie and embark on "knowledge adventures." A knowledge adventure is an alternate screen that approaches the film's themes from a different angle. For instance, a caveman hurtling a spear in the movie is linked to a knowledge adventure about the speed of thrown objects, specifically dealing with baseball legend Nolan Ryan's 100-mph fastball. Other knowledge adventures interspersed throughout *Speed* illuminate the true origins of the bicycle and the world's fastest production car. Like most of *Speed*, the accent is on light and lively information, which is why most of these knowledge adventures could just as easily be called "trivia adventures."

Four supplemental activities make up the Extended Learning Module. Most of them are on the order of crafting crude sailboats to study the effects of wind on speed. Although I couldn't help wondering if these projects came straight out of Childcraft Encyclopedias or Cub Scout manuals (they seemed so familiar), at least they might foster continued interaction with the subject. Additional activities include three simulations, the best of which compares animal and vehicle speeds with that of human thought. "The Speed of Thought" is more interesting than the rollercoaster sim, which unfortunately obstructs its first-person perspective by adorning the front of the coaster buggy with meters. (We lose that rush of creeping over the peak and seeing the terrifyingly initial steep descent.) The other simulation follows an athlete's paces through track-and-field events like running, pole vaulting, and hurdling.

Formation flying is one of many topics covered in *Speed*.

Speed also includes a few simple games. One of these exercises tests reading speed and comprehension, while the other two are of the matching game variety. ("Which of the two animals shown is faster?" "To which of the four pictures does this speed correspond?") These games add value to the product, reinforcing concepts already put into play.

Everything *Speed* has to offer (movie, simulations, knowledge adventures, and games) can be accessed through the same main screen, so maneuvering through the program is simple.

Speed reflects Knowledge Adventure's belief that the best way to encourage learning is to make it fun. Following that philosophy, it makes sense that *Speed* entertains better than it informs. I question the decision to showcase a film format they can't begin to approximate on disc, but at least they chose a movie that suits the program's focus. *Speed* is an entertaining CD-ROM that's apt to provoke thought.

— Phill Powell

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

Dr. T.'s Sing-A-Long Kids' Classics

Windows $39.95

Dr. T's Music Software 124 Crescent Rd., Needham, MA 02194 Phone: (617) 455-1454

This 26-song kid's karaoke is a nice family or primary-school package. Most kids will know the songs here, traditional fare such as "Baa, Baa Black Sheep" and "I've Been Working on the Railroad." All of the tunes are playable as CD music, CD music with vocals, and computer music (MIDI files) from which you can change the song's tempo.

There are a variety of features in this program, but most of the fun comes when you mix in a microphone, select a tune, and the child sings the scrolling lyrics as the music plays. Most songs are in the key of F, a suitable key for kids' vocal range.

In Sing-A-Long mode, pick a tune and the band plays.

Little Kids' mode lets younger players click on a song by icon.

It's best to start out with Sing-A-Long mode. Here, animations run in the background while lyrics are displayed and a variety of male and female vocalists sing the tune you select. The rewind feature is handy. With it, you can quickly restart a song from any point.

Juke Box mode lets you play songs in your preferred order, and Little Kids' mode allows for minimal supervision (all songs are selectable by icons).

The program touts a target age range of 3-10, but ages 4-8 might be more appropriate based on responses from our own test group.

All in all, *Kids' Classics* is a solid, if unspectacular, program, and a decent value for the money. — *Lance Elko*

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

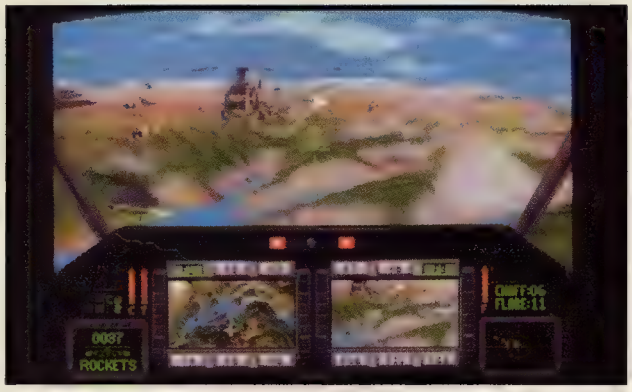
Comanche: Maximum Overkill

DOS $74.95

NovaLogic 19510 Ventura Blvd., Suite 200, Tarzana, CA 91356 Phone: (818) 774-0600

If NovaLogic hadn't made so many bold claims about the authenticity of *Comanche: Maximum Overkill*'s modeling of combat helicopter flight, this might be an easier game to like. As an arcade-style flying-and-shooting game, it's OK, but any resemblance between the way the helicopters in *Comanche* fly and actual helicopter flight is purely coincidental.

The new Comanche CD-ROM is a nicely done repackaging of the original game with *Missions Disk 1*, *Over the Edge*, and ten CD-only missions, bringing the total to 100 missions. Considering that it's playable from the CD-ROM, this is a good package for those who don't own or never played the original.



The graphics in *Comanche* are outstanding, but as a combat-simulator it needs a dose of realism.

The game itself is somewhat frustrating. NovaLogic's VoxelSpace terrain graphics are simply exquisite, but exterior views of the helicopter itself are not up to snuff. Missions are not planned, campaign-like combat strikes, but are instead isolated shoot-'em-ups with little real tension or purpose. The helicopter itself can take massive amounts of damage and keep flying, and flight models simply don't measure up to those in *Gunship 2000*.

It's a shame that NovaLogic couldn't develop a solid flight simulator around its amazing graphics. Folks looking for a fast-paced shooter will enjoy *Comanche*, but those seeking a good helicopter sim would do better with *Gunship*.

— *T. Liam McDonald*

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

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Star Trek: 25th Anniversary

DOS *no SRP*

Interplay 17922 Fitch Ave., Irvine, CA 92714
Phone: (714) 252-2820

About two years ago, Interplay released *Star Trek: 25th Anniversary* — one of the best Star Trek games to date. Based on the original TV series, the game let you play as James T. Kirk, captain of the original Starship Enterprise. You could command the Enterprise in space combat, lead landing parties, and seek the assistance of your friends Spock and McCoy. And most importantly, the game succeeded in recreating the flavor of the TV series.

From the bridge, you'll battle Klingons, give orders to your crew, and gain full access to the Enterprise computers.

Now, Interplay has re-released the game on CD-ROM, and added to the already impressive package the one thing you might have hoped for in the disk-based version: voice acting, featuring the entire original cast. William Shatner, Leonard Nimoy, DeForrest Kelley, James Doohan, Nichelle Nichols, and the rest of the crew are all here. The acting is very good, even among the non-Star Trek cast members. It goes a long way toward suspending disbelief, allowing you to immerse yourself in the game.

Considering how well most Trekkers know the *Star Trek* universe, a game based in that universe *must* be careful to remain true to the original. Fortunately, the designers were well aware of the demands placed on them by their subject. They've done a good job of remaining true to the characters and spirit of the original series, right down to the ever-present tricorders and the expendable security officer. Purists will notice a few bits of uncharacteristic dialogue, and may object to the occasional joke made at the series' expense. But on the whole, even the most devout Trekkers should be pleased.

As in the TV series, each new away mission brings its own special challenges.

Though the game is based on the original series, it doesn't merely recast old episodes in a computer-gaming mold. The seven adventures in *25th Anniversary* were written especially for the game. Each adventure is like a mini-episode of the series, beginning with an entry in the captain's log or orders from Star Fleet, then building to a potentially dangerous climax before a resolution is reached and the ship heads off to the next star system.

The episodes all begin on the bridge of the Enterprise. It's here that you, as Kirk, will steer the ship, issue orders to your crew (Uhura, Sulu, Scotty, Chekhov) and control shields, weapons, and damage repairs during combat. You can even log on to the ship's computers, requesting information on just about any subject in the game.

Once your course of action becomes clear, you'll beam down with your landing party for some hands-on action. Again, you control Kirk, this time using an efficient point-and-click interface. Click your left mouse button and a human outline pops onscreen; then click on the mouth to Talk, on the eyes to Look, etc. The interface is simple and straightforward, and never becomes intrusive.

Although the game itself is a couple of years old, the graphics hold up pretty well. They're pleasant, if not overwhelming. The game's one major flaw is that it's just too short. The seven adventures are all pretty easy to work through, and before you know it, the game is over. But the experience of playing, and especially of hearing the voices of the original cast, is rewarding enough to more than make up for the brevity. And fortunately, Interplay has just released *Star Trek: Judgement Rites* on disk, so you won't have to wait long for your next Trek fix.

Careful when traveling to new star systems. One false move might put you in hostile territory, jeopardizing ship and crew.

— Matthew A. Firme

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

VistaPro 3.0

DOS $149.95

Virtual Reality Laboratories 2341 Ganador Ct., San Luis Obispo, CA 93401 Phone: (800) 829-8754

If you've ever seriously considered trying your hand at creating realistic renderings of landscapes on your PC, you soon become aware of the tremendous amount of "grunt" work involved in setting up the basics. *Vistapro*, from Virtual Reality Laboratories (VRL), does all that work for you, leaving you free to experiment with simulating three-dimensional renderings of topographic, user-defined, or even random data.

The number of parameters over which you have control is mind-boggling – fortunately, novices don't have to struggle to get stunning results.

The number of parameters over which you have control in *Vistapro* is mind-boggling. A sampling of the kinds of things you can define include: positioning of the observer's camera, location of the sun, definition of clouds and haze, generation of rivers and lakes (with waves), placement of trees, and definition of tree and snow lines. Other controls include defining the number of polygons used to render a landscape and of the amount of dithering (fuzzing of boundaries) and texturing used in the rendition. Fortunately, novices to *Vistapro* don't have to struggle with figuring out what parameters to use; an IQ menu helps select predefined options to get low, medium, high, or ultra-high detail renderings.

Vistapro generates landscapes a frame at a time. Images can be saved as .PCX files, in 24-bit Targa and BMP format, or as a .DXF file that can be used with Autodesk's *3D Studio* or other 3-D rendering programs.

By slightly modifying the position of the camera, you can create an animation that "flies" or "drives" the observer through a landscape. Working all the positioning calculations by hand and entering them into a *Vistapro* script file can be a daunting task that is addressed by a second application on the CD-ROM, MakePath Flight Director.

Creating path scripts with MakePath is easy; the program generates a smooth spline curve through points you define. You can adjust the observer's altitude and relative bank angle along the path and, finally, generate a script of the flight path that's used with *Vistapro*.

MakePath offers several default vehicle types: in the air, you can fly in a glider, a jet, a helicopter, or a cruise missile; on the ground, you can ride either in a dune buggy or a motorcycle.

The third application, VistaMorph, allows you to create scripts for animations that smoothly morph one landscape to another over a range of frames.

The CD-ROM version provides the same sizeable gallery of landscape files that ship with the floppy-disk version of the product, as well as some 35 additional landscape files normally sold separately.

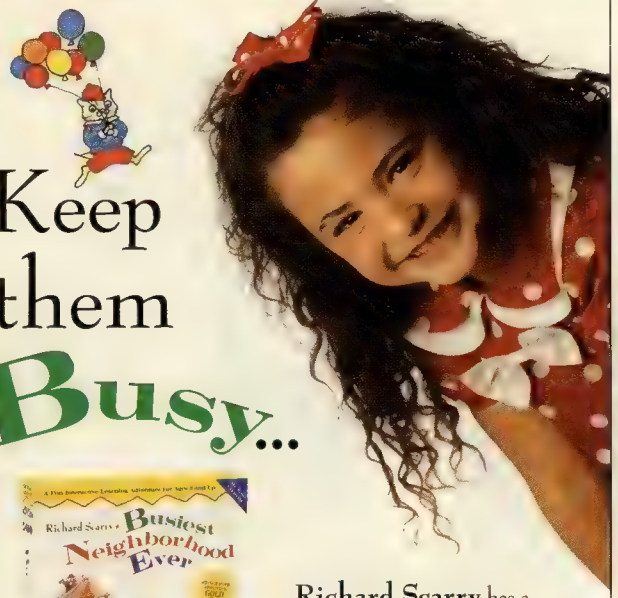
Notable landscapes include much of the U.S., Ayers Rock (Uluru) from Australia, and the entire equatorial region of Mars. All landscape data, by the way, is in the form of U.S. Geological Survey DEM (Digital Elevation Model) files. If you want to create DEM files using your own data, the CD-ROM provides a handy ASCII-DEM conversion utility.

Other gems on the CD-ROM include music and sound effects, support for viewing stereoscopic animations (using glasses available from a third-party vendor), and additional sample rendered images and animations, including a realistic 3-D bungee jump.

Vistapro's ability to let you render landscapes and then explore and transform them makes this a solid, entertaining package that lets you exercise your artistic skills and stimulate your imagination.

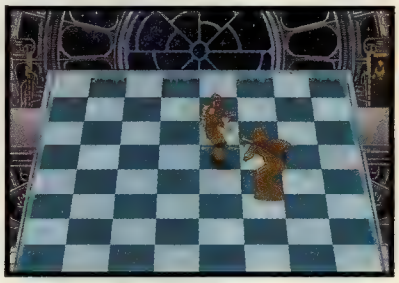
— Alex Lane

Entertainment Value:
Interface:
Visuals:
Audio: N/A
Overall:



animations are consistently superb. The game's icon-driven interface is initially confusing, but strong and flexible after you get used to it.

The most serious problem with *Star Wars Chess* is that, at the lower levels, it plays lousy chess. I'm not a great chess player by any stretch, but I was able to beat it my first two tries, and that just doesn't happen with me and chess programs. The game apparently uses the same engine that drives *Chessmaster 3000*, but it sure doesn't seem like it.



Chew-bacca fights a death duel with one of Darth Vader's storm troopers.

"Star Wars" fans have lots to like here, particularly C3PO's witticisms. Serious chess fans, though, are better off with the more solid *Chessmaster 3000* CD-ROM, and animated chess fans will find the *Battle Chess* CD-ROM generally better designed.

— *Neil Randall*

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

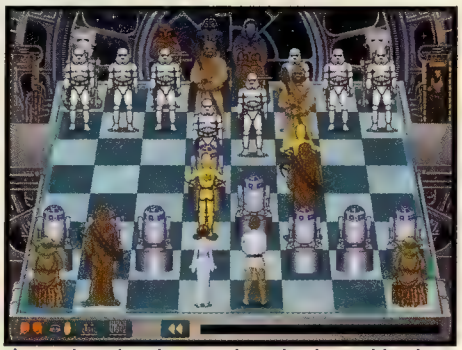
Star Wars Chess

Windows $79.95

The Software Toolworks 60 Leveroni Ct., Novato, CA 94949 Phone: (415) 883-3000

In this futuristic chess game, your pieces are represented by the animated likes of Han Solo, R2D2, and Yoda, and you make your moves with Darth Vader and his henchmen. You play by standard chess rules, but when opposing pieces meet, you get a animated battle scene complete with sound effects.

Graphics are splendid, although the the angled overhead view sometimes makes the board look cramped. Additionally, unless you install the maximum amount onto your hard drive, the animations of the pieces is glacially slow. The music, taken from the "Star Wars" soundtrack, is excellent, though annoying after a while, and the



The animation is tops, but the board looks cluttered due to the viewing angle.

Midnight Movie Madness with Gilbert Gottfried

Windows $59.95

MedioMultimedia 2703 152nd Ave., NE, Redmond, WA 98052-5515 Phone: (206) 885-4142

If you've gone to work gritty eyed from watching *Macabre* at 2 a.m., *Midnight Movie Madness* was designed for you. But while it's great to watch little-seen trailers from these B-movies, *Movie Madness* is to a *good* reference disc what *Robot Monster* is to *2001: A Space Odyssey*.

First, Gilbert Gottfried fans should go elsewhere. The comedian does a brief one-take routine for the intro, then disappears. His purpose is to set up this CD-ROM's biggest drawback: its asinine "plot," which features the unfunny jokes of a 1957 teenage ghoul. Why did Medio, makers of the classy *JFK* and *Ancient Architecture* discs, bother doing this? It's not campy...it's just stupid.

What you get: trailers from 100 bad horror flicks

Once you get past the premise — and it *is* an obstacle — *Movie Madness* can be fun. You can choose from 100 movies, each worse than the one before. You can select movies by category (e.g., Celebrity Lowpoints), genre, actor, director, decade, or title. You then watch a short clip from the movie or its original trailer, and you can also take a quiz or learn some trivia about each flick.

Still, most of these trailers are available in video compilations for a lot less money — and *you* get to add the sarcasm while you're watching 'em on tape. And that's the better deal.

— Leslie Mizell

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

Critical Path

Windows/Mac $79.95

MediaVision 47300 Bayside Pkwy, Fremont, CA 94538 Phone: (800) 684-6699

When this action-adventure opens, you're part of a two-copter team fleeing the devastation of nuclear war to an island reportedly safe for habitation. When both craft are downed by missiles over an uncharted island, the only survivors are you and Kat, the pilot of the other copter. While Kat sets out to cannibalize enough parts from her chopper to make yours airworthy, you make your way to a "control room," surrounded by mysterious buttons and switches. The buttons and switches control various traps, machines, and weapons, and by watching Kat's movements on a monitor you must decide which devices to activate — and when to activate them — in order to save her from the machinations of General Minh, the insane, drug-dealing ruler of the island.

The multimedia elements here — video, music and sound effects, the rendered 3-D backgrounds — are all unquestionably very good. But in *Critical Path*, the whole is less than the sum of these parts. The root cause lies in the extensive use of video — how do you "interact" with pre-recorded footage, other than to determine what scenes are shown? Game play consists almost entirely of entering codes or pressing a button. Make the right choice, and it's on to the next video clip; fail, and Kat loses a life (one of nine — get it?), you watch the footage again, and try another button.

Even if you're new to games, you'll probably finish *Critical Path* in a few hours. And whether you judge it as a movie, a game, or a hybrid of the two, that's just not enough bang for the buck.

— Stephen Poole

Talk about vicarious thrills you view all of Kat's exploits through a small monitor.

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

Jump Raven

Mac $69.95

Paramount Interactive 700 Hansen Way, Palo Alto, CA 94304 Phone: (415) 812-8200

There's a thin line between challenge and frustration when it comes to arcade-action games, and unless your coordination has been honed to near-perfection, *Jump Raven* veers into the latter camp pretty quickly. That's a shame, because nearly everything else about the game is top-notch.

Here's the plot: In the future, all that's left of thousands of species is genetic code stored in pods — and Neo-Nazi skinheads have stolen them. Piloting the Jump Raven, a tank/hovercraft, it's up to you to blast through the skins and retrieve the pods.

You can man the weapons, control

None of the co-pilots are great navigators, so make your choice based on how well each handles weapons – and the quality of their in-flight banter. Thrash and Cheesestick are the most fun.

hover, and guide the craft all by your lonesome, but you're much better off letting a co-pilot take care of some of those duties while you focus on a single task.

There are six co-pilots to pick from, each with a unique personality and special skills. The voice-acting for the co-pilots and the other characters you encounter is outrageously good; the graphics are almost uniformly top-drawer; and the four "theme" songs are great — as good as a lot of the stuff you hear on the radio.

But in the end, *Jump Raven* left me disappointed. The main problem is that while the game starts off fresh and exciting, it turns into a numbing routine. Scenery and action become repetitive *very* quickly, and after the first level, you'll find that the graphics and game play remain nearly unchanged. A little variety would go a long way in lengthening the shelf life of this one. Recommended for hard-core arcade fans only.

— *Stephen Poole*

Entertainment Value:
Interface:
Visuals:
Audio:
Overall:

The Sporting News Multimedia Pro Football Guide 1993

Windows $39.95

Compton sNewMedia 2320 Camino Vida Roble, Carlsbad, CA 92009 Phone: (619) 929-2500

This multimedia football guide is a pretty thorough, if vaguely organized, collection of the players, stats, and most memorable moments from the 1992 NFL season.

The main menu of *Football Guide '93* lets you access the database in a number of ways: "Statistics" provides facts on passing, rushing, scoring, etc. from 1970-'92; "Players and Coaches" covers active players and coaches from 1980-'92; "Teams" breaks the information down by team; "The Week in Review" covers a

You can review highlights of a team's best (and worst) performances.

weekly breakdown of the season; and "Highlights" presents a collection of all the program's videoclips, concentrating on the '92 season, but also including clips of hall-of-famers in action.

Football Guide '93 also features a Hall of Fame section devoted to the NFL's all-time greats, as well as a trivia game. The trivia game is set up to simulate a game of football, with correct answers advancing the ball. But after only a few sessions, the questions begin to repeat themselves.

Video clips are good, all provided by NFL Films. They move smoothly, with plenty of sound and informative narration. But there's very little other sound or music in the program, and not much besides the video clips to recommend the product's visuals. Worst of all, a number of info-display windows aren't big enough for the information they contain, and can't be resized. In short, the product just doesn't have enough pizzazz — or polish — to satisfy anyone who knows what multimedia can do.

— *Matthew A. Firme*

Entertainment Value:
Interface:
Visuals:
Audio:
Overall:

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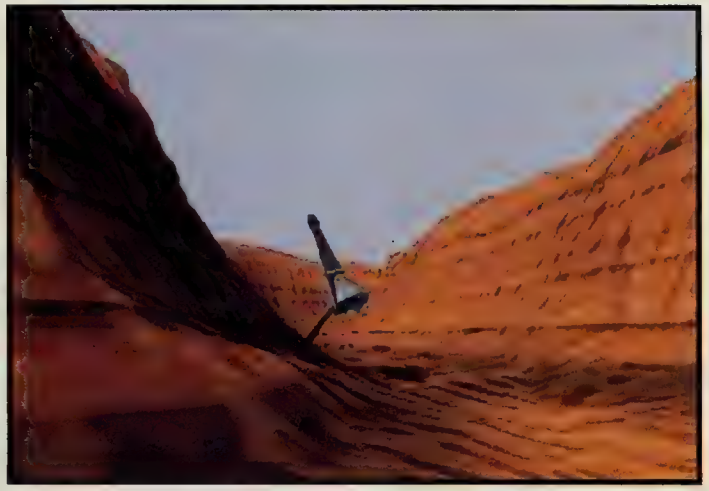
♦ ♦ ♦ ♦ ♦ ♦

RebelAssault

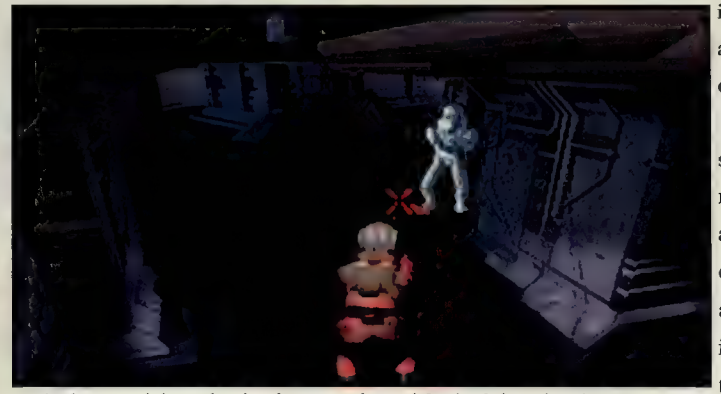
DOS $49.95

LucasArts Entertainment, P.O. Box 10307, San Rafael, CA 94912 Phone: (415) 721-3300

Rebel Assault is one of those CD-ROM games that almost everyone should own — if only to show off multimedia pizzazz to your non-computing neighbors. The sound effects and stirring "Star Wars" music, the digitized voices and images, the very look and feel of the popular "Star Wars" movies, are all here. Leave this game running in a computer store, and you'll definitely move some multimedia hardware.



Game play can be frustrating at times, especially when you crash and burn for the umpteenth time.



Rebel Assault has the look, sound, and feel of the classic Star Wars movie experience.

On the other hand, *Rebel Assault* suffers from some of the traditional weaknesses of CD-ROM-based action games. You run through a tightly prescribed series of on-screen movements. A slight variation from those movements means failure. Anyone who has played many CD games will know the feeling. Move here...here...then here...and, uh-oh, let's try it again and again until we've hit just the right pixel.

To make matters worse, hitting the right pixels is made even tougher by a twitchy game interface that's unstable and erratic.

While game play may be frustrating, the overall multimedia impact of *Rebel Assault* is simply stunning. You've got multiple levels, video from the motion pictures, a great John Williams' soundtrack, and excellent digitized speech.

And if, after seeing yourself repeatedly crash-and-burn, and a certain here-we-go-again feeling creeps in, it may be more than compensated for by the sheer thrill of being inside an interactive George Lucas movie.

— *Selby Bateman*

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

♦ ♦ ♦ ♦ ♦ ♦

Gabriel Knight: The Sins of the Fathers

DOS $59.95

SierraOn-Line P.O. Box 485, Coarsegold, CA 93614
Phone: (209) 683-4468

With *Gabriel Knight*, Sierra has dished up more than just a good-looking, well-written, intriguing new graphic adventure: *Gabriel Knight* is also the very promising birth of a new adventure series, and may well rank among Sierra's best.

When it comes right down to it, graphic adventures are pretty much alike. You walk into a scene, talk to people, examine everything, pick up a few items, and move on. Because of this premise, the graphic adventure depends on story, characters, graphics, and pacing more than many other types of computer games. And these are precisely the areas in which *Gabriel Knight* excels.

The voodoo theme adds both atmosphere and purpose to *Gabriel Knight*.

Knight himself is an important part of the game's success. An aspiring writer and book dealer living in New Orleans' colorful French Quarter, Knight is a disheveled, hip, likeable character. His book store — left to him by his father — isn't making much money, and a combination of laziness and writer's block have stalled his literary career. But he eagerly dogs his police-detective buddy Mosely, with whose help he hopes to crank out a real-life murder book on a series of voodoo-related slayings in the area.

As he investigates the murders, the real story of *Gabriel Knight* unfolds. He's drawn into the fascinating world of New Orleans' voodoo subculture, and thrust into relationships that run the gamut from steamy to dangerous. Adding immediacy to the drama is the gradual realization that Knight has a strange history of his own: He's descended from an old German family of *shattenjagers*, or shadow hunters. It soon becomes obvious that Knight's destined to become a *shattenjager* himself, and dedicate his life to hunting supernatural evil. This creates both a terrific tension as he moves toward the game's climax, and a pretty neat basis for future Knight adventures.

Giving texture to the game's excellent framework are several unique settings and a cast of memorable supporting characters. You travel from Louisiana to Germany, from Africa to a high-tech crime empire, and interact with people who are, on the whole, more fully developed than the secondary characters in most graphic adventures. And the game is considerably longer than many, giving you even more time to immerse yourself in its story and settings.

Visually, *Gabriel Knight* ranks among Sierra's best efforts. The cut scenes and interludes are reminiscent of a good graphic novel. There's no full-motion digitized video, but I, for one, am glad of that. Although it's a novelty the first few times, video clips can wear pretty thin.

The CD-ROM version of *Gabriel Knight* makes ambitious use of voice acting. Tim Curry plays Knight, Mark Hamill plays your policeman friend, and Efrem Zimbalist Jr. plays your old uncle Wolfgang. Nonetheless, I preferred playing without the voice actors; I didn't think Curry was very good as Knight, and preferred my own "imagined" voice for him and most of the other characters. The one exception was *Star Trek* star Michael Dorn, who made for a pretty good Dr. John, the game's biggest Voodoo villain.

Cut scenes like this make Knight one of Sierra's most visually stunning ever.

I enjoyed *Gabriel Knight*, and I'm already looking forward to the next game in this new series. After all, in the next go-round, Knight will be a full-time shadow-hunter. That's a pretty interesting job description, and should lead Sierra's new hero into some potentially bizarre adventures.

— Matthew A. Firme

Entertainment Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

EDUCATION

Dinosource

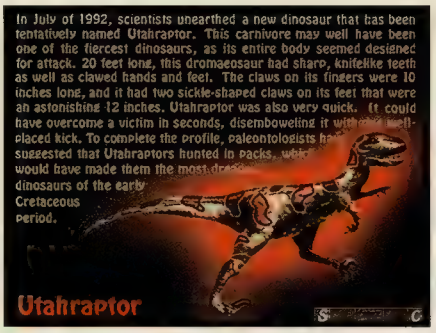
Mac/MPC $99.00 (Mac)
$79.00 (MPC)

Westwind Media Box 5833, Lake Ariel, PA 18436
Phone: (800) 937-8555

Among the many CD-ROMs catering to the archosaur enthusiast is *Dinosource*, an edutainment title from Westwind that has a mix of materials for children and adults.

Dinosource has four main modules: an illustrated database of every known dinosaur genus, a short essay separating dinosaur fact and fiction, a fossil-hunting game, and a quiz that tests your dino knowledge.

Dinosaur Fact & Fiction and the Dinosaur Database are probably the weakest components, although the latter offers some good features. You can select dinos by size, habitat, diet, and so on, then page through individual screens about each genus. Finds as recent as the Utahraptor are covered. Text entries, however, don't contain enough hard information. Also missing are any real-world illustrations — there's not a single fossil, skeletal reconstruction, or paleontologist to be seen.



The Utahraptor, the oversized raptor in *Jurassic Park*, is covered in *Dinosource*.

On the other hand, you'd better study the database closely if you want to beat Dinosaur Dilemma, the multi-player quiz game. The multiple-choice questions are truly difficult. But probably the most educational part of *Dinosource* is Dinosaur Dig, a game in which you're a paleontologist searching for an elusive prize fossil.

Is *Dinosource* fit to survive against the horde of competition? This disc's game value does earn it a niche habitat. Westwind should turn Dinosaur Dig into a full-scale game and leave dinosaur reference treatments to other CD-ROMs.

— *Steven Anzovin*

Learning Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

The Big Bug Book of the Alphabet

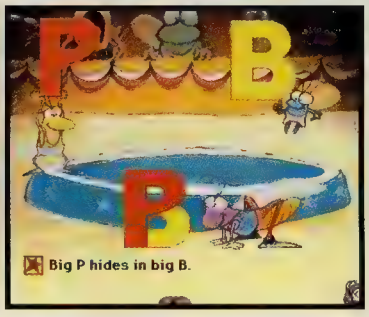
Mac/Windows/DOS $39.95

Milliken Publishing Co. 1100 Research Blvd.,
P.O. Box 21579, St. Louis, MO 63132
Phone: (800) 325-4136

Based on Milliken's book of the same name, *The Big Bug Book of the Alphabet* provides a delightful, entertaining journey from A to Z. With a whimsical insect circus as the backdrop, *Big Bug* is sure to help preschoolers become acquainted with the alphabet.

The presentation is typical of multimedia books. Each page contains narrated text, with each word or letter highlighted as it's spoken. Children learn both upper- and lowercase letters by shapes and sounds.

There are several games to play along the way. The program asks you to find the bug hidden behind one of the letters by clicking on the letter itself. With each click, the letter is highlighted and pronounced. Other games ask children to match objects with letters, such as a picture of a cat with *C*.



Big Bug offers a variety of games designed to help youngsters with letter recognition.

The soundtrack is excellent, and pronunciations are precise. Illustrations are lively and vibrant. After the text is read, the circus bugs perform, and the animations here aren't just window-dressing — they draw attention to the shapes of the letters.

Because of its reasonable price (the paperback version is included), *Big Bug* is a bargain. The program tends to run a bit slowly, even with a double-speed drive, but it's a small price to pay for a quality educational program.

For children getting started with the alphabet, this is an excellent place to begin. — *Lee Buchanan*

Learning Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

Undersea Adventure

DOS/Windows $79.95

Knowledge Adventure 4502 Dyer St., La Crescenta, CA 91214 (818) 542-4200

Here's a company that knows when they're on to a good thing. After enchanting us with *Space Adventure* and *Dinosaur Adventure*, the folks at Knowledge Adventure have turned up the productivity and released, in swift succession, *America Adventure*, *3-D Dinosaur Adventure*, and a strange, yet fascinating package titled *Speed* [see coverage elsewhere in this issue]. Now comes *Undersea Adventure*, which adds refinements to the Knowledge Adventure system.

The company's philosophy is simple: make multimedia happen. Each product in the Adventure line combines videos, illustrations, photographs, and text, and each also mixes varieties of teaching methods. The main portion of each package is the encyclopedia-like reference area, which is supplemented by games and other activities. The box for *Undersea Adventure* recommends the product for ages 3-103, and that's correct.

Undersea Adventure opens with a video clip of a great white shark. Hardly a surprise, given our post-Jaws obsession with these creatures. But there's much more than sharks here. The clips in the Undersea Theater range from dolphins through whales and beyond, and the most telling thing to say about this section is that you wish there were more.

The Undersea Reference area combines three screens — a large graphic takes up most of the right half, and as you run your mouse over the top of it, you're presented with hypertext links that take you to other topics. Accompanying text takes up the lower left corner, while the standard Knowledge Adventure globe appears above it. Speaking of globes, you can get a stunning topographical view of the oceans in this program, complete with explanations about waves and weather patterns.

Kids are fascinated by sea life. Just ask any parent who has visited Sea World or any other major marine park. Recognizing this, the designers clearly decided to weight *Undersea Adventure* on the side of younger sets. The result is an edutainment experience for people of any age.

Ocean Tours offers a young child's look at sharks, coral reefs, marine mammals, and "odd couples." You get a graphic on the right, while a narrator reads along with brief text on the left. For older kids, the Seacology Lab features the inside view of a variety of specimens. You can examine the muscles, the brain, all the internal systems. A game called "What Do I Eat?" tests kids' knowledge about the culinary habits of the sea life they've encountered, and like all Knowledge Adventure games, it works well even though it might seem unexciting.

Finally, *Undersea Adventure* includes a 3-D Deep Sea Hunt. The "ZoomScape" modules used here, apparently becoming a standard part of Knowledge Adventure's titles, remain overly difficult though they're becoming increasingly effective. Here, you maneuver through corridors, entering areas with different kinds of sea life. You can hunt for treasure, hear sounds, and encounter creatures in more or less their own environment. ZoomScape is an excellent idea, and as it develops, it could become the central focus of Knowledge Adventure's products.

Knowledge Adventure has a strong idea with this presentation system. Effectively, they've developed a multimedia publication tool, and they're determined to provide a wide variety of volumes in the series. So far, it's working superbly.

— Neil Randall

The main section of *Undersea Adventure* allows detailed exploration about sea life. Typos aside, this study of the blue whale is particularly engrossing.

Learning Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

Dinosaur Safari

Windows/Mac $69.95

Creative Multimedia Corp. 514 NW 11th Ave., Suite 203, Portland, OR 97209 Phone: (503) 241-4351

Another dinosaur CD-ROM? Haven't we had enough? What's this one got to offer that the rest don't already?

Quite a bit, in its own way. Unlike the rest, *Dinosaur Safari* puts you on a quest. Far in the future, you're hired by the National Chronographic Society to collect information for a special multimedia magazine dealing with reptiles of the Mesozoic era. With your camera, notebook, and camcorder, you travel through time and get the data you need. Do well, and you'll get better tools for bigger jobs.

When you return to base after your quest, your findings are evaluated. If they're needed, you get paid for your efforts.

Developed in conjunction with the Oregon Museum of Science and Industry, *Dinosaur Safari* emphasizes learning through play. Your job is to fill in gaps in knowledge about groups of dinosaurs and other prehistoric animals as well. Part of the task is understanding which creatures are dinosaurs and which aren't, and using that knowledge to go to the right time periods and locations.

While the fun lies in the collecting, the real learning lies in determining how early animals are classified. In the "Cladogram" room, where you begin each safari, life forms are divided among their classes. You select which specimens you'll seek, find out how much you'll be paid for them, then head out across time.

Occasionally this game makes you feel as if you've actually landed in the past, and that alone makes it worth a look.

— Neil Randall

Learning Value:
Interface:
Visuals:
Audio:
Overall:

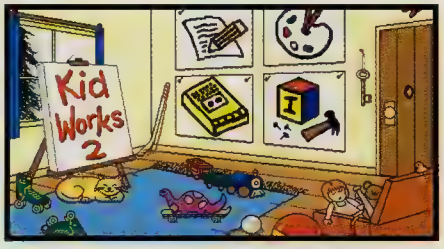
Kid Works 2

Mac/DOS/Windows $59.95

Davidson & Associates P.O. Box 2961, Torrance, CA 90509 Phone: (800) 545-7677

Kid Works 2 is a creativity package that lets children write stories and paint pictures. The software is comprised of four open-ended activities. Story Writer consists of a basic word processor that encourages children to write stories. Kids embellish story text with word or picture icons from the program's extensive icon library. The Icon Maker toolkit enables children to design additional icon art for Story Writer compositions.

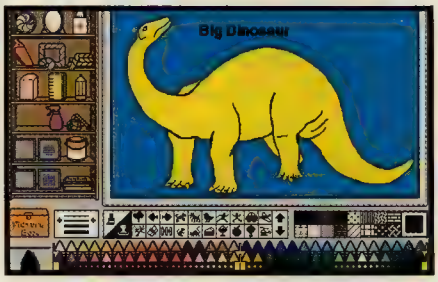
Kids also can paint original story pictures with Story Illustrator, then import their work to Story Writer. Illustrator features a variety of paintbrushes, colors, shapes, and stamps.



Kids design stories, then listen to the computer read them aloud.

There are so many tools available, it's fortunate that online help identifies what each tool can do. In Story Player (the final activity), kids listen to their stories read aloud. The narrator's voice has a distinctive robot quality, but kids don't seem to mind. A speech editor lets them adjust pronunciation for any story text. Since the computerized text-to-speech technology reads phonetically, children don't have to worry about perfect spelling.

Kid Works 2 is not a new program, but has only recently made the jump from floppy disk to CD-ROM format. The disc



Story Illustrator has an amazing collection of paint tools for designing your own art.

edition (which includes both Mac and Windows versions) ships with 50 more coloring-book pictures and 100 more picture icons than its older cousin. If you want engaging educational software at a price that won't bust your budget, try *Kid Works 2*.

— Carol S. Holzberg

Learning Value:
Interface:
Visuals:
Audio:
Overall:

Big Anthony's Mixed-Up Magic

Windows/Mac $69.95

Putnam New Media 11490 Commerce Park Dr., Suite 130, Reston, VA 22091 Phone: (703) 860-3375

Delightful is one of those wishy-washy words that sometimes sounds as if you're just being polite — like describing a blind date as having a "good personality." But *Big Anthony's Mixed-Up Magic* is a *delightful* disc. It's designed for kids 5-10, but it's sure to be enjoyed by your whole family.

Inspired (rather than based) on author/illustrator Tomie dePaola's Caldecott Honor-winning book *Strega Nona Meets Her Match*, *Big Anthony* follows the antics of bumbling Anthony in his own adventure, exploring the medieval world of Calabria, making mischief, playing games such as concentration, and learning simple magic tricks.

The easy-to-use interface lets children read *Strega Nona* in its entirety, lead Anthony's adventures, or take a shortcut to one of 20 different points in the story. The shortcuts allow kids to play just the games or bypass a part of the program they find too difficult or perhaps boring. But boring shouldn't be a problem — the game has terrific graphics and animation; a fun and varied soundtrack; amusing, bigger-than-life characters; and even simple Italian phrases and their translations ("*Per l'amor di Dio!*" "For goodness sake!").

The game division of the program begins with a theatrical musical number, complete with singing barnyard friends.

So "delightful," "charming," "engaging" — pick your own adjective. The price tag's a little high, but *Big Anthony's Mixed-Up Magic* is just great for kids. And besides, it's a program adults will equally enjoy.

— Leslie Mizell

Learning Value:
Interface:
Visuals:
Audio:
Overall:

3-D Dinosaur Adventure

Windows/DOS $79.95

Knowledge Adventure 4502 Dyer St., La Crescenta, CA 91214 Phone: (818) 542-4200

Knowledge Adventure's *3-D Dinosaur Adventure* seeks to distinguish itself by featuring 3-D graphic elements that are viewed by donning one of the two pairs of supplied 3-D glasses. The most impressive sequence features an animated Tyrannosaurus Rex that jumps out of the screen at you. After such an auspicious beginning, the rest of *Dinosaur Adventure*'s 3-D graphics are somewhat disappointing.

The package's title would lead one to expect a plethora of such graphics. However, the 3-D Museum contains only four rooms, one of which is a repeat of the T-Rex opening. The others serve up a few interesting effects, the most notable being a navigable static display of multiple dinosaurs. An otherwise extremely well-done Dinosaur encyclopedia contains a few lackluster 3-D illustrations. A "Save The Dinosaurs" game is not in 3-D, as the description on the box would lead one to believe.

One of the rooms in the 3-D Museum lets you roam around to see the dinosaurs from different angles.

The good news is that *3-D Dinosaur Adventure* provides a thoroughly pleasant, entertaining, and educational look at dinosaurs for both young and old dinophiles. Nine different interactive modules serve up a variety of drawings, videos, animations, quizzes, and games that provide a satisfying depth of play. We predict that *3-D Dinosaur Adventure* will still be on dealer shelves long after other species of dinosaur software have become extinct.

— Arlan Levitan

Learning Value:
Interface:
Visuals:
Audio:
Overall:

Forever Growing Gardens

Windows/Mac $49.95

Media Vision 47300 Bayside Pkwy, Fremont, CA 94538
Phone: (800) 684-6699

Media Vision, a company we've long associated with sound cards and upgrade kits, plants some software seeds with *Forever Growing Gardens*. This interactive CD-ROM invites children to show off their green thumbs by cultivating three electronic gardens: a suburban flower patch, a vegetable garden, and the grounds of a medieval castle. Botanical layouts may be saved to disk and reworked at a later time.

A visit to the hardware store lets children select seeds. Every garden grows its own special varieties. Some seed packets produce ordinary flowers or vegetables. Others yield surprising results (e.g., fire-breathing Snap Dragons that snap, helicopter flowers that fly, fanciful topiary bushes, etc.). Gardeners must follow planting and watering instructions on the seed packet to achieve success. A reference almanac at the hardware store is also a good resource for growing tips.

Kids can show their green thumbs growing designer flowers.

After planting seeds and using the watering can, gardeners sit back and watch their plots grow, speeding up or slowing down the calendar as needed. Each garden features an amusing game which sends players on a madcap chase to capture a trio of pesky gophers.

There's always something whimsical spouting in this imaginative land — and kids are sure to be charmed.

— Carol S. Holzberg

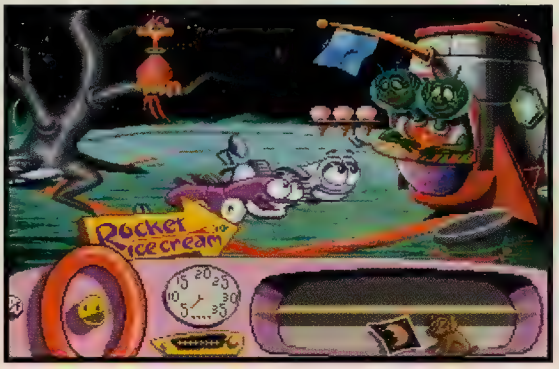
Learning Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

Putt Putt Goes to the Moon

DOS/Mac $49.95

Humongous Entertainment 13110 NE 177th Pl., Box 180, Woodinville, WA 98072 Phone: (206) 485-7988

This latest title from Humongous is another winner. Based on the adventures of Putt Putt, a charming little car with a tankful of personality, *Putt Putt Goes to the Moon* is targeted to ages 3-8. Like the award-winning *Putt Putt Joins the Parade* (Humongous's debut product), *Moon* has instant appeal to children. As in its earlier titles, Humongous employs an intuitive interface that registers instantly with kids, high-quality original music and sound (with plenty of unique character voices), and creatively rendered screens packed with clever animations. The sum total is a delightful adventure in which a child helps Putt Putt navigate to a variety of locations, find objects, and solve problems.



Putt Putt and friend get their main assignment from this fine lunar couple.

The object in *Moon* is to help a stranded Putt Putt build a rocket so he can return to Earth. In his search for parts, he encounters a variety of games, explores craters, and meets a host of amusingly odd aliens. As in all Humongous games, children are invited to explore, and they're given just the right amount of help if they need it.

Is *Moon* better than its blue-ribbon predecessor? Not necessarily — it's fundamentally the same game with a new landscape, new characters, and new problems to solve. That is, it's the same formula. In this case, however, that's fine. The quality of Humongous titles is so good that more of the same is welcome, at least for a while. Watching children play Humongous games is all the evidence you need.

— Lance Elko

Learning Value:	
Interface:	
Visuals:	
Audio:	
Overall:	

APPLICATIONS

Professor Multimedia

Windows $79.95

Individual Software 5870 Stoneridge Dr., #1, Pleasonton, CA 94588-9900 Phone: (800) 331-3313

Your computer may be the best teacher you ever had. It's certainly patient enough, and knowledgeable too, especially when teaching from a 650MB CD-ROM curriculum. Although it can't replace the guidance of a professional educator, computer-based training (CBT) is perhaps the best path to self-education. After all, Ben Franklin ("A self-taught man hath a fool for a master") didn't anticipate the help of a "teacher in a box," with expertise, lessons, testing, and feedback all squeezed onto a little silver platter.

Individual Software is leading the way with the next wave: Multimedia Based Training (MBT), taking full advantage of today's CD-ROM graphics, sound, and animation. The diagram accompanying this review includes only a few of the dozens of screens and included demo programs that bring you up to full speed in your understanding and application of multimedia technology.

Let's take a mini-tour of *Professor Multimedia*. The figure may seem cluttered at first (after all, I wanted to fit a lot of screens into a small amount of space, and create the illusion of multimedia in print), but just follow each numbered bullet, in order:

1. *Professor Multimedia* is laid out attractively in a series of menus and sub-menus. But first, click on the ?

mark to learn more about the interface, and move on to the "How To Use Professor Multimedia" screen.

2. Examine the arrows (to go to a previous or next page), the MENU button (returns you to the previous menu), and the EXIT button (instantly exits the program, quite alarming the first few times you think you're just trying to back up).

3. Throughout the program, you can click on icons to hear sounds, view animation or videos, and hear or repeat a voice track.

4. Returning to the main menu, we now click on "What is Multimedia?" — my favorite part, since it examines many fundamental concepts and technologies in everyday language.

5. Choosing "Graphics" starts a graphics lesson, narrated by a friendly animated woman who talks you through most of the lessons. Often you can click on an optional voice icon to hear more detail. The Graphics lesson covers the types of graphics (from geometric objects to clip art to photos, including PhotoCD), and braces you for difficulties when you work with various screen resolutions and color palettes.

6. Return to the "What is Multimedia Screen?" as we click on "Sound" to get a lesson on .WAV digital sound, CD-Audio, and MIDI music.

7. We next try the Animation lesson to learn about object animation (a static picture moving around) versus frame (or cell) animation, as used in cartoons (such as in the three cells shown, from a Daffy Duck cartoon). Other lessons include information on buying or upgrading to multimedia specs, and how to shop for other accessories.

8. Return now to "Everyday Multimedia" and click on "Multimedia and Education." This lesson encapsulates the advantages of computer-based training, with an emphasis on K-12 and edutainment.

9. You can actually try out product demos of Microsoft's *Dinosaurs*; *Impressionism and Its Sources* from Ebook; and Broderbund's *Arthur's Teaching Troubles*, a delightful animated book for children.

10. "Multimedia In Entertainment" actually only hints at the vast amount of titles available on CD-ROM, but does include four product demos: Broderbund's *Myst*, *PC Karoake* from Sirus Publishing, Electronic Arts' *Labyrinth of Time*, and Microsoft's *Cinemania*.

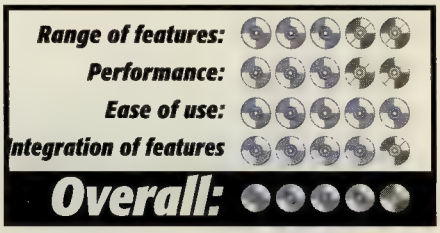
11. Wrapping up the course, you now move into the more advanced application of Business Multimedia. "Multimedia Presentations" gives you an overview, and asserts that you need no special training nor do you need to hire consultants to create eye-popping demos of your own, and if you already use a slideshow program, shows you how you can easily add multimedia elements to it.

12. As an example, five top presentation packages are demonstrated, (*PowerPoint*, shown here) and you're taken through a few simple steps from a blank template to a finished mini-presentation.

13. These lessons show the talent of Individual Software's educators and programmers. They're the folks that created *Professor DOS*, and they've set their sights on more complex Windows programs now, such as Lotus *Freelance*, shown here. In addition to tutorials and self-running demos, you can actually use a working model (a stripped-down application) of *WordPerfect Presentations*.

As a bonus, you can reuse the dozens of movies, sounds, and graphics on the disc (for your personal use only, and you aren't allowed to redistribute them.) The screens shown here are by no means all you get, and we skipped some sections entirely. I spent more than four consecutive hours just trying to see and hear it all, and still haven't explored every nook and cranny. You'll probably spend several days taking the courses, and then you can invite your friends and colleagues to your PC so they too can learn the tips and tricks of the multimedia trade.

— Charles Brannon



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CD AllCache 2.0

Mac $79.95

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Even the latest 3X and 4X CD-ROM drives are agonizingly slow when compared to your hard drive. That's why business is booming for utilities that create a special CD-ROM data-storage area called a *cache* on your hard drive or in RAM. A cache maps a CD-ROM's directory to the hard drive as the disc is loaded, then reads the directory at hard-drive speeds, saving a few fractions of a second on each access. A data cache stores recently retrieved data in memory as you play the CD-ROM and looks there first each time new data is needed. Once data is there, you get it at RAM speed.

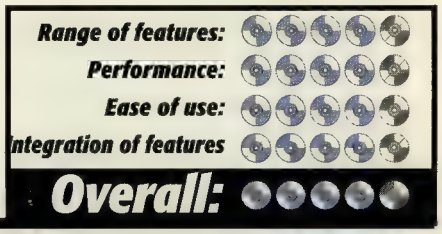
CD AllCache 2.0, has both kinds of cache, as well as some other useful utilities. Included is a universal CD driver that allows your Mac to recognize just about any CD-ROM drive. There's also a miniature CD Audio control panel that mimics the controls of most CD players; it takes up less screen room than Music Box, which is shipped with many drives and offers more features.

However, it's the *CD AllCache* utility that will sell this package to most people. What sets it apart from others is its flexibility. It has several preset parameters that optimize the total cache size for popular programs and titles — plus settings for QuickTime-based discs and ones based on *MacroMedia Director* and PhotoCD. There's also a database setting, one for Broderbund programs, another for *The Journeyman Project*, and so on.

CD AllCache made a noticeable, though not spectacular, difference for the discs I tested it with. With the cache optimized for *Director*, I obtained definite access improvements in two *Director*-based discs, *History of the Blues* and *Seven Days in August*. Quicker access was especially welcome with *Blues* because it, like some other CD-ROMs, won't play audio independently of changes on the screen.

If you're like me and run your CD-ROMs on an older, slower drive, or you just want to squeeze every ounce of performance from your CD-ROM system, then you need a disk cache program. *CD AllCache* certainly does the job.

— *Steven Anzovin*



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CD-ROM and the Data Superhighway

It seemed that every year since 1988 was hyped as the "year of CD-ROM," the year when the shiny little discs would finally hit it big with users. And every year was a letdown until 1993, when CD-ROM reached a crucial turning point.

Now it's clear that 1994 is the year when CD-ROM is finally living up to its long-awaited destiny. So, naturally, we're hearing grumbles that it was all a big mistake. CD-ROM, claim the pundits, is obsolete — and, in fact, was *born* obsolete, from the day a bright-eyed engineer unplugged the CD player from his stereo and cobbled it onto his PC. "CD-ROM is too slow for data," the critics wail. "And it's read-only. Bah!"

For mass storage, CD-ROM is the only affordable alternative that's here now, and that's what counts.

Everyone knows CD-ROM is slow compared to a hard drive. But one CD-ROM can hold 660 MB, which is a lot larger than *my* hard drive. And I have more than 20 CD-ROMs on my shelf. For mass storage of reference material or megabyte-hungry multimedia, CD-ROM is the only affordable alternative that's here *now*, and that's what counts.

Besides, slow is relative. Recently I needed to look up the proverb "Necessity is the mother of invention." Lacking a copy of *Bartlett's Book of Familiar Quotations*, I turned to *Library of the Future*, a CD-ROM from World Library. Instead of browsing the disc's 950 literary works myself, I let the computer tackle the job. I initiated a full-text search on the phrase "Necessity is the mother." Despite this rather long search phrase and a single-speed CD-ROM drive, the computer found two hits in about a minute (*Gulliver's Travels* and *Aesop's Fables*.) Could I have found those obscure references any faster myself at a library? Not in this dimension. Besides, I didn't have to visit a library, because that single CD-ROM *is* a library.

All technologies are flawed, and CD-ROM is no exception. Its main shortcoming is that CD-R (recordable) drives currently cost $5000 and up, far too pricey for most people. We desperately need a read/write medium with more capacity than floppies, and someday we'll get one. But there will always be a need for an affordable mass-distribution medium — something that delivers preformatted content to thousands of people at a low cost. It's looking possible that CD-ROM's successor won't be a newfangled disk drive that spins faster, or a futuristic solid-state device. Instead, it may be a coax or fiber-optic cable that pumps the information into your home, school, or office at such high speeds you won't notice it's coming from hundreds of miles away.

This is one application of the "data superhighway" you've heard about. Today, online access to remote information is hampered by painfully slow link-ups through modems and voice-grade phone lines. Soon, those electronic pathways will be widened to carry a torrent of data that will far outstrip the capacity of the fastest CD-ROMs.

Sometimes it's better to own a copy of the information you frequently access, and you won't lose that option. Just as today we have both personal book collections and public libraries, tomorrow's data superhighway will let you choose between your own collections of discs or instant access to vast repositories of online information. Some of that information will be free, like electronic libraries.Some of it will cost money, like today's online services and pay-per-view TV.

But what matters is that more information than ever before will be widely available, and computers will help you find what you want — just as today they can rapidly locate obscure references on CD-ROMs. Sometimes *convenience*, too, is the mother of invention.

Tom Halfhill has been writing about the computer industry since 1981. A former editor of COMPUTE Magazine, *he is currently senior editor for the West Coast Bureau of* Byte Magazine. *Email: THALFHILL@BIX.COM.*

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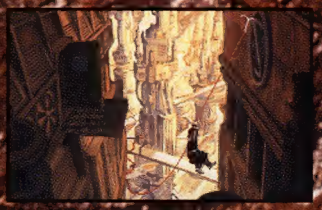

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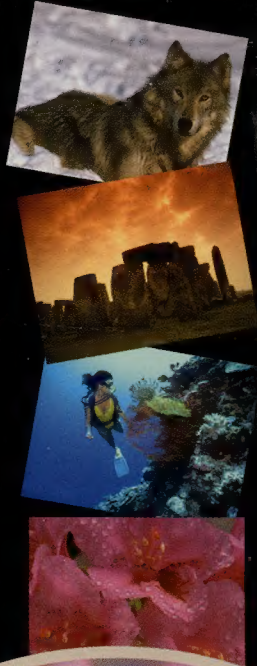

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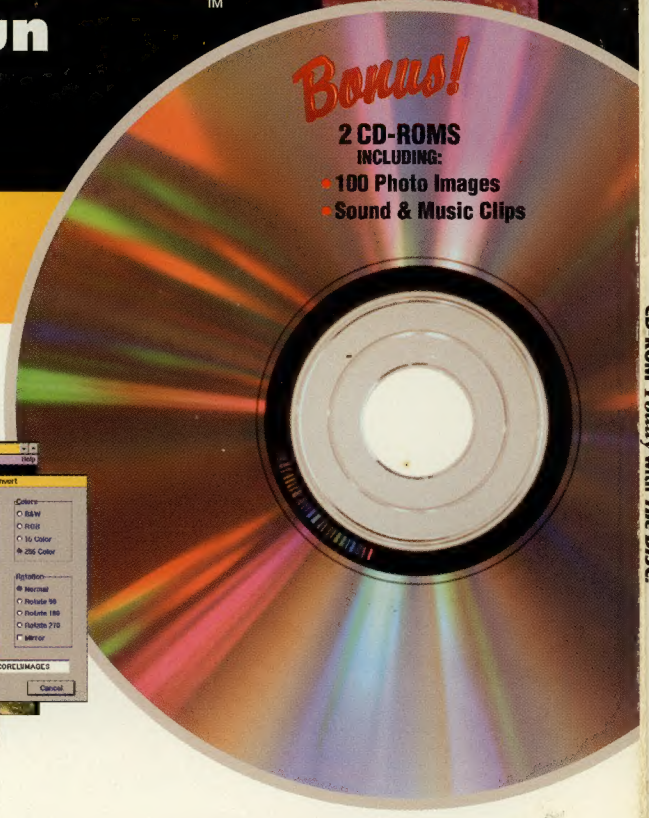

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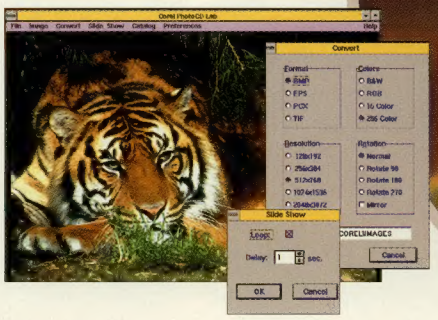

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